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ABSTRACT

This workbook, one of six professional development manuals for adult education (AE) teachers, explores instructional methodologies to promote student success, the theories behind them, and their applications in the self-paced, open-entry/open-exit AE classroom. The pretest and posttest appear first. Each of the seven units begins with a list of objectives and then provides instructional material. Unit 1 provides a theoretical background on how learning occurs and what characteristics of instruction promote learning. Unit 2 introduces Gardner's multiple intelligences. Unit 3 reviews definitions for learning disabilities classifications, examines characteristics of students with learning disabilities, reviews the evaluation process, and offers practical classroom teaching strategies. Unit 4 discusses accelerated learning techniques and how they can help the adult learner increase the depth, breadth, and speed of learning. It reviews the methodologies and their applications to AE classrooms. Unit 5 looks at benefits of using whole language learning with adult students and discusses use of volunteers to provide extra one-on-one assistance in the classroom. Unit 6 reviews five key components of cooperative learning and gives tips on how to make it work within an AE classroom. Unit 7 reviews Paideia's history and principles as an educational concept developed by Adler and explores possible classroom applications of Paideia techniques. Appendixes include pretest and posttest answer keys, instructor self-evaluation, and student evaluation. (YLB)

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104p

Florida Community College at Jacksonville

ED 430 100

From Theory to Practice: Adult Instructional Methodologies

PROFESSIONAL DEVELOPMENT MANUAL III

1998

CE 078 578

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Address inquiries to:

Florida Community College at Jacksonville
Quality Professional Development Project
940 N. Main Street, Room 203
Jacksonville, FL 32202-9968
(904) 632-3059

Florida Community College at Jacksonville
Program Development Department
1998

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From Theory to Practice: Adult Instructional Methodologies

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Professor Lenora Basso, GED

Professor Patricia Levine - Brown, Letters

Hope Clayton, Project Coordinator

Dr. Paul Eggen, University of North Florida

Mary Fuller, Program Facilitator

Monica Murr, Project Coordinator

Cynthia Pope, QPD Senior Clerk

Valarie Stratton, QPD Senior Support Specialist

Katherine A. Thomas, QPD Administrative Assistant III

Shari Weitzner, Hope Haven Children's Clinic & Family Center

Dr. Delphia Williams, Campus Dean of Instruction

Mary T. Murphy
Administrative Assistant III
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From Theory to Practice: Adult Instructional Methodologies

TABLE OF CONTENTS

Foreword..... ii

Pre-Test..... iv

Post-Test..... ix

UNITS

I. Modes of Learning..... 1

II. Multiple Intelligences..... 19

III. Learning Disabilities..... 29

IV. Accelerated Learning..... 46

V. Whole Language Learning..... 53

VI. Cooperative Learning..... 61

VII. Paideia..... 73

VIII. Appendix..... 84

Pre-Test Answer Key..... 85

Post-Test Answer Key..... 86

Instructor Self-Evaluation..... 87

Student Evaluation..... 89

FOREWORD

As an adult education teacher, you will encounter a diverse student population. Therefore, you will need to use a variety of instructional methodologies to promote student success. This workbook, **From Theory to Practice: Adult Instructional Methodologies,** will explore some of these methodologies, the theories behind them, and their applications in the self-paced, open-entry/open-exit adult education classroom.

Unit I: Modes of Learning

Modes of Learning provides a theoretical background on how learning occurs and what characteristics of instruction promote learning.

Unit II: Multiple Intelligences

Multiple Intelligences, developed by Howard Gardner, is introduced with its eight types of intelligences.

Unit III: Learning Disabilities

Learning Disabilities reviews the definitions for learning disabilities classifications, examines the characteristics of students with learning disabilities, reviews the evaluation process, and offers practical classroom teaching strategies.

Unit IV: Accelerated Learning

Accelerated Learning opens with a discussion of these techniques and how they can help the adult learner increase the depth, breadth, and/or speed of learning. It also reviews the methodologies and their applications to adult education classrooms.

Unit V: Whole Language Learning

Whole Language Learning looks at the benefits of using this learning approach with adult students, and discusses the use of volunteers to provide extra one-on-one assistance in the classroom. This methodology is thought to be especially significant for adult basic education (ABE) instruction.

Unit VI: Cooperative Learning

Cooperative Learning reviews its five key components: positive interdependence, individual accountability, group processing, social skills, and face-to face interaction. Also, an experienced GED instructor gives you tips on how to make cooperative learning work within an adult education classroom.

Unit VII: Paideia

Paideia reviews its history and principles as an educational concept developed by philosopher and educator Mortimer Adler. The goals of Paideia activities are to help participants think critically, listen carefully, and question thoughtfully. Also, an experienced adult high school instructor who has extensive Paideia training reviews possible classroom applications of Paideia techniques.

As a new adult education teacher, you will find that part of the challenge of teaching adult learners is finding creative teaching strategies that will work where traditional teaching approaches may have failed. As you reopen the doors of learning for your students, the materials presented in this workbook should inspire you to learn more about adult instructional methodologies.

PRE-TEST

Name: _____ **Date:** _____

CIRCLE THE CORRECT ANSWER FOR EACH QUESTION:

1. Which of the following best defines learning?

   a. Learning is a change in internal, mental "structures" that may or may not result in immediate behavioral change.
   b. Learning is the observable change in behavior that occurs as a result of experience.
   c. Learning is a change in learners' "beliefs" about what influences behavior.
   d. Learning is an assimilation of experiences into existing understanding of the way the world works.

2. Which of the following factors influence learning?

   1. learners' perceptions of their experiences
   2. learners' background knowledge related to the topic they're studying
   3. learners' beliefs and expectations about what they're learning
   4. learners' awareness of their own habits and understanding
   5. learners' innate gender characteristics

   a. 1,2,3,4,5
   b. 1,2,3,4
   c. 1,2,3
   d. 1,4
   e. 2,3

3. From the perspective of instruction, which of the following ***most strongly*** influences learning?

   a. how well organized the instructor is in explaining the content
   b. how effectively the learner is reinforced for desired performances
   c. the clarity of the objectives identified for the learning experience
   d. how active the learner is in the learning process
   e. the background knowledge of the instructor

4 In his theory on Multiple Intelligences, Howard Gardner defines a person's preference for working alone or in cooperation with others as

a visual/spatial intelligence
b logical/mathematical intelligence
c intrapersonal and interpersonal intelligence
d introverted and extroverted personality types

5 According to Gardner, most standardized tests measure only

a intrapersonal and interpersonal intelligences
b visual/spatial and musical intelligences
c verbal/linguistic and logical/mathematical intelligences
d learning styles
e student effort

6 According to Gardner's theory of Multiple Intelligences, solving a jigsaw puzzle would be an example of which type of intelligence?

a body/kinesthetic intelligence
b visual/spatial intelligence
c musical/rhythmic intelligence
d interpersonal intelligence

7 A learning disability

a can usually be outgrown
b manifests itself in a consistent manner
c is more common in individuals from lower socio-economic backgrounds
d is a permanent and invisible disorder

8 A learning disability

a can be properly diagnosed by a medical doctor
b is formally diagnosed through a psycho-educational evaluation
c is easy to diagnose
d can always be diagnosed in young children

9. An individual with a learning disability

   a. demonstrates a gap between achievement and aptitude.
   b. has a low IQ.
   c. demonstrates a gap between achievement and aptitude and a processing problem.
   d. has learning deficits in all subject areas.

10. A processing problem means that

   a. an individual can't retain information.
   b. an individual never learned basic math and reading skills.
   c. the manner in which a person takes in, retains and expresses information is affected.
   d. a person is not working hard enough.

11. An adult with a learning disability may have a deficit

   a. in reading comprehension.
   b. in time management.
   c. in written expression.
   d. in all of the above.

12. Accommodations for individuals with learning disabilities at adult education levels

   a. are usually not effective due to the age of the student.
   b. compromise teaching standards.
   c. are often, but not always, effective and must be accomplished through trial and error.
   d. are never mandated.

13. Which of the following would be a strategy to accelerate learning in the Adult Studies classroom?

   a. Paideia
   b. cooperative learning
   c. interactive multi-media
   d. self-paced instruction
   e. all of the above

14 Accelerated learning is an umbrella term that encompasses many aspects of

a cooperative learning only
b learning theories and strategies
c games and toys
d music and rhythm
e four learning styles

15 The whole language approach works well with the adult learner because

a the typical adult learner cannot succeed using conventional methods
b the adult learns to read and write the language with which he or she is most familiar
c whole language activities are easier than conventional methods
d the learner doesn't have to learn standard English

16 The best general definition of whole language could be expressed as

a a reading technique that has replaced phonics instruction with a more practical and broad-based approach to language instruction
b a language program that includes multi-cultural themes and terminology
c a method of teaching that uses relevant texts to teach language and writing skills, beginning with the whole text, then developing specific skills for the text
d a method of instruction that appeals to a wide general population using components from various language instruction methodologies

17 Volunteers can be used in the classroom in all but the following ways

a grading papers and making answers keys
b tutoring students
c filing and other office work, making photocopies, running errands
d in all of the above ways
e 1 and 3 above

18 An example of positive interdependence is

a close proximity of group members
b small number of members (2-4)
c shared materials
d individual test taking
e lecture

19 Cooperative Learning differs from individualistic or competitive learning because the resulting attitudes are summarized by

a I win - you lose
b I sink or swim alone
c We're all in this together
d The teacher is the imparter of great wisdom
e all of the above

20 The Paideia classroom is different from the traditional teaching classroom for which of the following reasons

a There is more emphasis on coaching and discussion of ideas than lecturing
b the arrangement of the room
c The reading materials are more challenging
d all of the above

21 Which educational philosopher is considered the father of the Paideia program?

a Malcolm Knowles
b Ted Sizer
c Mortimer Adler
d Albert Ellis

22 The three goals of a Paideia program are teaching students to

a help, serve, and encourage
b educate, direct, and teach citizenship
c learn, earn a living, and become a productive citizen
d serve, direct, and educate

23 Paideia is a program based on

a lecture
b teacher-centered activities
c student-centered activities
d didactic instruction, coaching, and seminars

POST-TEST

Name: _____ **Date:** _____

CIRCLE THE CORRECT ANSWER FOR EACH QUESTION:

1. Which of the following best defines learning?

   a. Learning is a change in internal, mental "structures" that may or may not result in immediate behavioral change.
   b. Learning is the observable change in behavior that occurs as a result of experience.
   c. Learning is a change in learners' "beliefs" about what influences behavior.
   d. Learning is an assimilation of experiences into existing understanding of the way the world works.

2. Which of the following factors influence learning?

   1. learners' perceptions of their experiences
   2. learners' background knowledge related to the topic they're studying
   3. learners' beliefs and expectations about what they're learning
   4. learners' awareness of their own habits and understanding
   5. learners' innate gender characteristics

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3. From the perspective of instruction, which of the following ***most strongly*** influences learning?

   a. the clarity of the objectives identified for the learning experience
   b. how well organized the instructor is in explaining the content
   c. the background knowledge of the instructor
   d. how effectively the learner is reinforced for desired performances
   e. how active the learner is in the learning process

4 Interpersonal and intrapersonal intelligence refers to the ability of a person to

a see spatial relationships
b share resources
c work alone or in cooperation with others
d pass standardized tests
e answer essay questions

5 Verbal/linguistic and logical/mathematical intelligences are commonly measured

a by cooperative learning exercises
b on standardized tests
c in a Paideia group
d by an evaluation of learning styles
e by teacher observation

6 According to Howard Gardner, visual/spatial intelligence can be demonstrated by

a repeating a rap song
b hands-on work
c completing a standardized test
d solving a jigsaw puzzle
e working together well with others

7 A learning disability

a is a permanent and invisible disorder
b can usually be outgrown
c is more common in individuals from lower socio-economic backgrounds
d manifests itself in a consistent manner

8 A learning disability

a is easy to diagnose
b can be properly diagnosed by a medical doctor
c can always be diagnosed in young children
d is formally diagnosed through a psycho-educational evaluation

x

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   b. has learning deficits in all subject areas.
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12. Accommodations for individuals with learning disabilities at adult education levels

   a. are never mandated.
   b. are often, but not always, effective and must be accomplished through trial and error.
   c. are usually not effective due to the age of the student.
   d. compromise teaching standards.

13. Which of the following would **not** be a strategy to accelerate learning in the Adult Studies classroom?

   a. self-paced instruction
   b. cocoperative learning
   c. computer assisted instruction
   d. Paideia seminars
   e. none of the above

14. A term that can be used to describe a wide variety of learning theories and strategies that speed up the learning process is

a. cooperative learning
b. learning modalities
c. learning preferences
d. accelerated learning
e. self-paced instruction

15. The whole language approach works well with the adult learner because

a. the learner doesn't have to learn standard English
b. whole language activities are easier than conventional methods
c. the typical adult learner cannot succeed using conventional methods
d. the adult learns to read and write the language with which he or she is most familiar

16. The best general definition of whole language could be expressed as

a. a reading technique that has replaced phonics instruction with a more practical and broad-based approach to language instruction
b. a method of instruction that appeals to a wide general population using components from various language instruction methodologies
c. a method of teaching that uses relevant texts to teach language and writing skills, beginning with the whole text, then developing specific skills for the text
d. a language program that includes multi-cultural themes and terminology

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a. running errands, making photocopies, filing and other office work
b. tutoring students
c. grading papers and making answers keys
d. 1 and 3 above
e. in all of the above ways

18. An example of positive interdependence is

a. lecture
b. small number of members (2-4)
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d. shared materials
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19. Cooperative Learning differs from individualistic or competitive learning because the resulting attitudes are summarized by:

a. The teacher is the imparter of great wisdom.
b. I sink or swim alone.
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a. Malcolm Knowles
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a. serve, direct, and educate.
b. help, serve, and encourage.
c. educate, direct, and teach citizenship.
d. learn, earn a living, and become a productive citizen.

23. Paideia is a program based on

a. lecture.
b. teacher-centered activities.
c. student-centered activities.
d. didactic instruction, coaching, and seminars.

UNIT I: MODES OF LEARNING

THE LEARNER WILL BE ABLE TO:

- ✓ **Identify the principles that describe learning.**
- ✓ **Identify the characteristics of instruction that promote learning.**

LEARNING AND MOTIVATION

INTRODUCTION

This section provides a brief overview of the prominent views of learning and motivation that are influencing instruction in our public and private schools, colleges, and universities. It will briefly examine behaviorism, social cognitive theory, information processing, and constructivism as the dominant views of learning. In addition, it will examine expectancy x value theory as it applies to motivation. It will also review research that has examined assessment practices and the impact that these practices have on student learning.

BEHAVIORISM: A PHILOSOPHY OF LEARNING

Behaviorism describes learning as a change in observable behavior that results from experience (Mazur, 1994). B. B. Skinner (1094-1990) is identified by leaders in the field of psychology as the most influential psychologist of the 20th century (Myers, 1970). Skinner argued that behaviorism is more a philosophy than a theory with its focus on observable behaviors. In its pure form, behaviorism attempts to meet the criteria for being a true "science."

Behaviorism has important implications for instruction. Learning is the result of reinforcement and punishment. Reinforcement is an increase in behavior as the result of a consequence, such as praise for a correct answer, high test scores, good grades, a bonus check for exemplary work, or compliments. In contrast, punishment is a decrease in behavior as the result of a consequence, such as criticism, or reluctance to work out after getting sore from a previous workout. Applied to instruction, behaviorism suggests that information to be learned must be presented in such a way that the desired performances can be reinforced. This means that information should be organized into small, isolated and decontextualized pieces, which gradually accumulate to higher-order abilities. Learning is hierarchical, and prerequisite skills and abilities must be mastered before higher levels of learning can be attempted.

A great deal of curriculum is based on behaviorist principles. Looking at grammar rules, for example, we see that they are usually described and then illustrated in isolated sentences. Later the learner is to demonstrate correct usage of the rule on other sentences. So, it is assumed that these performances will eventually result in skilled writing. Therefore, a behaviorist's explanation for motivation focuses on the use of reinforcers to motivate behavior.

SOCIAL COGNITIVE THEORY

"What are you doing?" Jason asked Kelly as he came around the corner and caught her in the act of swinging her arms back and forth. "I was sort of practicing my batting swing," Kelly responded with a red face. "I was watching a game on TV last night and the way those guys swing. It always looks so easy, but they hit it so hard. It just seems like I should be able to do that. It was sort of running through my head, so I just had to try it."

Social cognitive theory, based substantively on work by Bandura (1986, 1989), is rooted in behaviorism but goes well beyond it. It differs from behaviorism in the following ways:

Definitions of Learning

We saw in our section on behaviorism that learning was defined as a relatively enduring change in behavior that occurred as a result of experience. For social cognitive theorists, this exclusive focus on behavior is too limited. They instead view **learning** *as an internal mental process that may or may not be reflected in immediate behavioral change* (Bandura, 1986). Social cognitive theory considers, in addition to behavior and the environment, the storing of information in learners' memories as well as personal factors, such as beliefs and expectations. Kelly, for example, didn't try to imitate the baseball swing until the next day, meaning her observations of the players on TV had to be stored in her memory. Also, her comment, "It just seems like I should be able to do that," suggests a belief about her ability, and this belief influenced her behavior.

Views of Reinforcement and Punishment

Behaviorists and social cognitive theorists describe the influence of reinforcement and punishment differently. For behaviorists, there are direct causes of behavior. In contrast, social cognitive theorists believe people form expectations about consequences that are likely to result from various behaviors. For example, if we study hard and do well on a test, we expect to do well on a second test with a similar amount of study. If we see someone being reinforced for a certain behavior, we expect to be reinforced for a similar behavior.

The fact that we have expectations about consequences means that we are aware that behaviors will be reinforced. This is important because, according to social cognitive theory, reinforcement only changes behavior when learners know what behaviors are being reinforced (Bandura, 1986). If a student believed that his changed study habits were the cause of his improved scores, he would maintain those habits. If he believed that some other strategy was more effective, he would change his behavior accordingly.

These factors have two implications for teachers. First they suggest that teachers should specify what behavior will be reinforced, so students can adapt their behavior accordingly, and second, learners need feedback, so they know what behaviors have resulted in desired

consequences. For instance, if a student gets full credit on an essay item on a test, but doesn't know why full credit was given, he many not know how to respond correctly the next time.

Social cognitive theory also helps us explain behavior when expectations are not met. For example, suppose your instructor gives you a homework assignment, you work hard on it, but he doesn't collect it. The non-occurence of the expected reinforcer (credit for the assignment) can act as a punisher. You will probably be less likely to work hard for the next assignment. Just as the non-occurrence of an expected reinforcer can act as a punisher, the non-occurence of an expected punisher can act as a reinforcer (Bandura, 1986).

Modeling is probably the most prominent concept to exist in social cognitive theory. Modeling can be used to explain how we acquire new behaviors, facilitate existing behaviors, change inhibitions and arouse emotions. It can either be direct or symbolic, such as observing the behavior of people on TV, in movies, books, and even cartoons. Models of behavior that are perceived as competent and similar are the most effective. High status behavior models tend to be regarded as having competence outside their areas of expertise, such as professional athletes endorsing everything from breakfast cereal to motor oil.

A concept called *cognitive modeling* has become influential in instruction. Cognitive modeling provides access to the thinking of experts, allowing the teacher to share the thought processes involved in analyzing and solving problems.

Social cognitive theorists view reinforcement and punishment differently than do behaviorists. Behaviorists believe they are a direct cause of learning. Social cognitive theorists believe they create expectations that impact motivation.

Social cognitive approaches to motivation can also be characterized as expectancy x value theories (Feather, 1982), because they suggest that learners will be motivated to work on a task to the extent that

- they expect to succeed on the task
- they value achievement on the task

If both are present, learners may develop a sense of *self-efficacy* or a perception that they can succeed on challenging academic tasks. Self-efficacy is impacted by past experience, the experience of others, persuasion, and behavior modeling.

INFORMATION PROCESSING

The beginnings of the "cognitive revolution" are often traced to a symposium held at the Massachusetts Institute of Technology in 1956 (Bruer, 1993). A number of research programs were merging and pointing to a paradigm shift, away from behaviorism and toward a "science of the mind." It was at this symposium that Noam Chomsky (1956) presented a convincing criticism of behaviorism as an explanation for language learning. Newell and Simon (1956) first suggested the link between computer and human information processing, and Miller (1956) introduced the concept of *chunking* individual bits of information into more meaningful units.

Information Processing: A Computer Model of Cognition

Information processing describes learning in terms of three information retrieval systems--sensory memory, working memory, and long-term memory, cognitive processes, such as attention, perception, rehearsal, encoding, and retrieval, and metacognition, which is knowledge and control of cognitive processes.

Information processing suggests that learning begins when information is essentially "photographed" by sensory memory, moved as a result of attention and perception into working memory, and as meaningful representations are formed, stored in long-term memory. Working memory's most significant characteristic is its limited capacity (Bruer, 1993). As

a result it is often called a "processing bottleneck" (Gagne, Yekovich, & Yekovich, 1993). Its capacity can be effectively increased, however, through the "chunking" process. Expert performance in any field is characterized by the ability to recognize patterns which allow large amounts of information to be "chunked" and processed.

Making Information Meaningful

Information processing has important implications for learning because of its emphasis on **meaningfulness** that describes the number of associations or links between one item of information and others in long-term memory and context. Learning is influenced by the context in which it exists, and learning is increased when topics and ideas are related to each other. Learning is made meaningful through the processes of organization, elaboration, and activity.

Information processing has made an important contribution to our understanding of learning. It has defined the roles of attention, perception, and working memory. It also established that learners should be active in creating their own understanding of the way the world works. Finally, we should emphasize context and meaningfulness in our instruction.

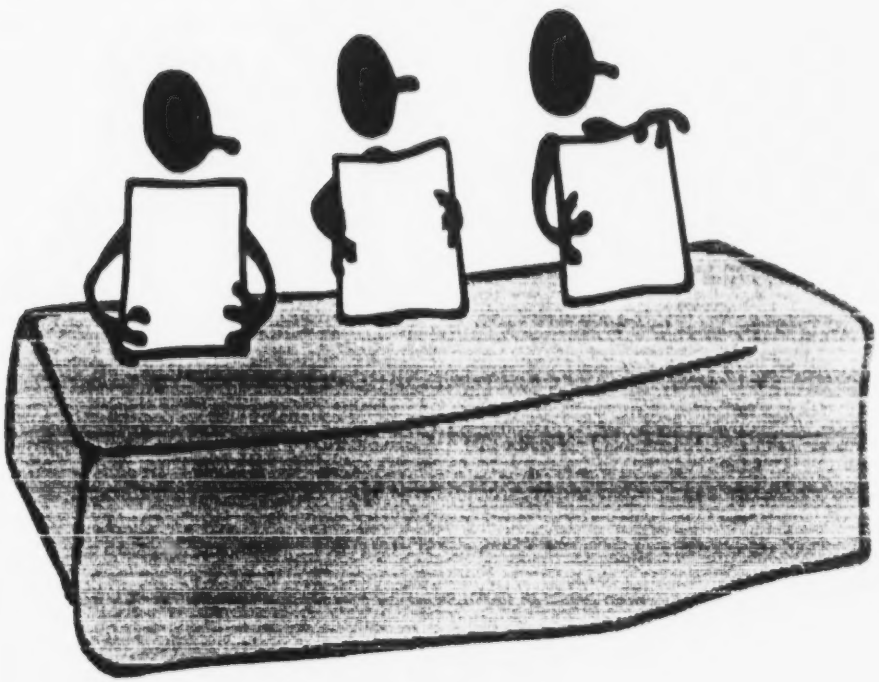
CONSTRUCTIVISM

All cognitive theories are based on the assumption that learners are active in developing their own understanding of the topics they study. Some researchers, however, argue that theoretical approaches, such as information processing, do not emphasize the process of *knowledge construction* adequately (Derry, 1992). Most experts agree that constructivism has the following four characteristics:

- Learners construct their own understanding.
- New learning depends on current understanding.
- Learning is facilitated by social interaction.
- Meaningful learning occurs within realistic learning tasks.

LEARNING AND ASSESSMENT

"Here is something approaching a law of learning behavior for students: namely that the quickest way to change learning is to change the assessment system" (Elton & Laurillard, 1979, p. 100). This quote on teachers' classroom evaluation practices underscores the powerful effect that teachers' quizzes, tests, and other assessments have on the learning behavior of students. For a review of instructor assessment practices and their impact on learning , see Crooks (1988) and Assessing the Adult Student, Manual I, Quality Professional Development Project (1998).



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LEARNING PRINCIPLES AT WORK IN THE ADULT EDUCATION CLASSROOM

Listed below are ten principles of learning followed by comments on their application in an adult learning classroom You would be wise to consider how to incorporate these into your work with adult learners

1. **LEARNING IS INFLUENCED BY LEARNERS' EXPECTATIONS AND BELIEFS ABOUT THEIR CAPABILITY TO UNDERSTAND THE TOPICS THEY STUDY.** Many adult learners have experienced difficulty or even failure in their earlier schooling Adult education instructors need to help their students make a shift from the fear of failure to a belief in their own competency Adult learners can work effectively in a self-directed classroom once they have come to understand that they can learn independently and only use the instructor as a facilitator

2. **LEARNERS NEED TO BE ACTIVE IN THE LEARNING PROCESS.** This works in two ways First adult learners construct their own understanding of the topics they study They don't receive understanding directly from their teachers or the written materials It is all learned in terms of the experiences they have had

throughout their lives. In addition, in adult education classrooms, students are not passive listeners. They are self-directed and work at their own pace, with instructor facilitation when requested.

3. **BECAUSE LEARNERS CONSTRUCT THEIR OWN UNDERSTANDING, GAPS, UNCERTAINTIES AND MISCONCEPTIONS OFTEN EXIST.** Filling those gaps and changing misconceptions takes time and effort. An instructor may be more effective in helping a student identify and address such educational gaps if you understand the student's background and past experience.

4. **LEARNING IS A SOCIAL PROCESS.** It requires frequent interaction between learners and instructors. Even though the adult education classroom is self paced and individually oriented, the instructor can encourage social learning by giving direct attention to individual students, grouping students who are working on the same materials, and encouraging students to help each other.

5. **LEARNING IS FACILITATED BY HIGH-QUALITY EXAMPLES AND REPRESENTATIONS OF THE TOPICS LEARNERS STUDY.** High-quality means that all the information learners need to understand about the topic is included in the examples. Learning typically proceeds from concrete and specific ideas to abstract and general patterns. The adult education instructor needs to assist the students in finding ways to understand and even visualize the abstract ideas. Hooking the new information to what the student already knows is one way to make new information understandable. Using mnemonics (assisting or designed to assist memory) is one of those processes that is often very effective. So is providing the information in more than one form. Teaching something by showing it in print - which is visual - and then discussing it with the student - which is oral - often helps students understand information and cement it in their long-term memory.

6. **ALL NEW LEARNING EXISTS IN THE CONTEXT OF CURRENT UNDERSTANDING.** What learners already know will strongly influence how much and how well new learning will occur. Instructors need to utilize the rich knowledge and background experiences of the adult student in learning new information. Linking life experience and knowledge to ideas being learned fosters more efficient learning.

7. **LEARNERS LEARN TO DO WELL ONLY WHAT THEY PRACTICE DOING.** As they practice, they modify their understanding based on the feedback they receive. Adult education instructors can increase their students' depth of learning by devising hands-on contextual learning exercises to accompany textbook learning. For instance, a math instructor teaching how to calculate the area of a rectangle might have the students measure the length and width of the classroom and calculate how many square yards of carpet they would need in order to cover it.

8. **LEARNING REQUIRES FEEDBACK.** Feedback helps learners modify and elaborate on their understanding to make it more valid and complete. Feedback assures the student he or she is learning the material correctly or helps him or her to see that more work is needed. Adult students who have returned to school after dropping out also often need a great deal of reassurance as they build their confidence in their academic abilities. Instructors need to realize how crucial their feedback and realistic encouragement can be to student success.

9. **LEARNERS LEARN MOST EFFICIENTLY WHEN THEY LEARN TO MONITOR THEIR OWN COGNITION.** Letting the students decide whether they can move forward to the next section or need to meet with the instructor for additional assistance gives them the opportunity to judge how well they have learned a subject. That empowerment can do a great deal to foster motivation within the student. The self-paced environment of the adult education classroom allows students to establish the pace of learning that works for them without worrying about "keeping up with the class," and allows them to seek extra help without embarrassment.

10. **LEARNING AND MOTIVATION ARE INCREASED BY SUCCESS IN EXPERIENCES LEARNERS PERCEIVE TO BE CHALLENGING AND WORTHWHILE.** If an instructor can first help a student develop realistic goals, the student will more readily make the connection between classroom learning and those goals. Student success can be fostered by building a strong connection between the academic and the vocational skills.

****

EXERCISES ON LEARNING THEORIES

Applying the information you have learned from Unit I, read the first exercise below and think through and write (if you choose) your response to the question. Then turn immediately to the "Feedback for Self-Paced Exercises" section which follows these question pages. Locate #1 of the feedback statements and compare your response to it. Complete the remaining exercises in the same manner. Take particular note of exercises 1, 2, 3, 4, 9, 11, 12, 14, and 15.

1. Joni Williams' students complain after completing a long assignment, "Man, Mrs. Williams, you sure do pile on the homework." Joni then prepares a shorter assignment for the next day, ans as soon as it is given the students respond, "Gee, Mrs. Williams, you must love to give homework." As Joni begins to give her homework assignment on the third day, the students protest, "I hope this isn't going to be another killer homework assignment."

   Using behaviorism as a basis, explain Joni's behavior (reducing the length of the assignment) and explain the students' behaviors (complaining).

2. Sara, a junior college student, is eager to respond to questions in class, and regularly raises her hand to respond. However, in spite of her efforts, Mr. Edwards calls on

one of her classmates each time. This process continues for the next two days with the same results. The third day Sara sits quietly, not raising her hand.

Using behaviorism as a basis, explain Sara's behavior.

3. In an effort to promote a positive and supportive classroom environment, Mrs. Drexler lavishly praises her students for their answers, regardless of quality. To her dismay, the students' behavior is not increasing as she hoped, and in many cases it is decreasing.

Using behaviorism as a basis, explain why her praise is no longer effective.

4. Steve, a junior college student, happens to bring a copy of *The Great Gatsby* with him to his physics class. Mr. Horton, his physics teacher, compliments him on his range of interest and his taste in American literature. Soon Steve is seen carrying a copy of William Faulkner's *As I Lay Dying* in the hall. Ann is one of Steve's classmates and was there when Steve and Mr. Horton had their conversation. She asks Steve if she can borrow *The Great Gatsby* and she begins reading it.

Using social cognitive theory as a basis, explain Steve's (bringing the copy of Faulkner's book) and Ann's (bringing *The Great Gatsby*) behaviors.

5. Jeff has just watched *Dr. Zhivago*--the story of a Russian physician and poet, set during the Russian Revolution, and his love affair with Laura, the subject of his poems--for the first time in his life. He finds his eyes getting moist and he feels almost as if he wants to rush forward to help when he watches an overwhelmed Zhivago try to catch Lara as she walks down a Moscow street.

Using social cognitive theory as a basis, explain Jeff's reaction.

6. Lori said to her boyfriend, Fred, "C'mon, let's dance," as a DJ began another set. "Wait a minute," he responded, "Not right now." "Awww," Lori continued, "You're such a good dancer. You can do any of these." Fred shrugged and smiled at Lori's enthusiasm. Two other couples then went out to the dance floor as Lori and Fred

continued chatting and glancing towards the floor. "Okay, let's go," Fred says, pulling Lori onto the floor.

Using social cognitive theory as a basis, explain Fred's willingness to dance.

7. You turn in an assignment, but your teacher doesn't grade or return it, and you then exert less effort on your next assignment.

Using social cognitive theory as a basis, explain why you exerted less effort on the second assignment.

8. You're talking to a friend in a noisy restaurant. You have essentially "tuned out" the surroundings. Suddenly, you turn at the sound of your name.

Using information processing as a basis, explain why you suddenly turn your head.

9. Mrs. Amos' students understand simple algebraic equations, and she is now working with them on the solutions to simultaneous equations. She models the process for solving simultaneous equations, then gives the students several practice examples. She follows by demonstrating the solutions to three equations in three unknowns, and gives the students several examples where they have to find the values of the variables. In each case she gives the students detailed feedback as they practice.

Using information processing as a basis, explain why Mrs. Amos would choose to move the students so carefully through the process, providing practice and feedback throughout.

10. Consider the following proverb, "A bird in the hand is worth two in the the bush." We tend to interpret it simply as, "A bird in the hand is worth two in the bush." Using information processing as a basis, explain why.

11 Henry James is teaching his students about the eastern and western states of the United States. He prepares a chart, which is outlined as follows:

	Geography	Climate	Economy	Lifestyle
Eastern States				
Western States				

He assigns teams of two to gather information about each of the cells in the chart (such as the geography of the western states). The students provide the information, Henry helps them put it in the chart.

Using information processing as a basis, explain why Henry's matrix is important, and also explain why he would assign the students to gather the information to be put in it.

12 You have begun your day's learning activity. The students are watching you and are ready to begin. Research indicates that an effective beginning point in the learning process is review in the form of statements such as, "OK, now describe *in your own words* what we did yesterday," to serve as a springboard for the day's lesson.

Using information processing as a basis, explain why a review such as this is effective teaching behavior.

13 Mr. Smith has a girl named Katherine in her class. He is very good about knowing his students' names and calls on all of them regularly. One weekend he was at a social event and Katherine was there as well. He recognized her and prepared to introduce her to his wife. Much to his embarrassment he couldn't remember her name.

Using information processing as a basis, explain why he would have trouble remembering her name.

14 You have a class of students whose backgrounds are diverse. You want them to understand the concept that pressure is the amount of force that is exerted on a certain area. You have assessed their understanding of the concept *pressure* by asking them questions, and you have found that understanding varies widely among the individual students. Some equate pressure with force, others can state the definition, but they seem to merely have it memorized, and others have only a vague understanding of the concept.

Using information processing as a basis for your teaching, which of the following is the most effective?

a. Write the equation *Pressure = force area* on the board, define force and area for the students, and explain that force "over" area means that you divide the force by the area.

b. Stand up in front of the class on both feet and then on one foot. Have the students compare the force you exert on the floor and the amount of area you're standing on in both cases. Lead them to conclude that you exert twice as much pressure on one foot as you do on two feet.

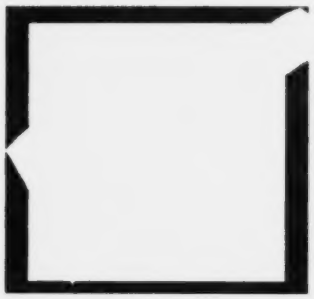
c. Explain that pressure is the amount of force on a certain area and then explain that if you put a lot of force on an area, such as one square inch, the pressure will be greater than if you exert a small force on the same area--the one square inch.

d. Have the students who can give the definition of pressure explain to the rest of the class what pressure means to them.

15 After reading the chapter in the text, Marisa then writes an answer to each of the questions that are in the margins of the book. After writing her answer, she looks at the feedback in the student supplement. Her friend Helen also reads the text. She then reads the questions in the margins and then looks at the feedback in the student

supplement. Marisa consistently scores higher on the tests and quizzes.

Using information processing and constructivism as a basis, explain why Marisa scores higher than does Helen.



FEEDBACK FOR SELF-PACED EXERCISES

1. Joni's behavior is decreasing as a result of being presented with the students' complaints, so she is being punished.

   The students' behavior (complaining) is increasing as a result of Joni reducing the homework assignment, so they're being reinforced.

2. Sara isn't being reinforced for her efforts to respond to questions in class. So, her behavior (trying to answer) disappears.

3. Over-reinforcement can lead to satiation, much in the same way that we are no longer attracted to food just after we've had a big meal. The students are becoming satiated with Mrs. Drexler's praise.

4. Mr. Horton reinforced Steve, which resulted in him bringing the second book. Ann is being vicariously reinforced when Mr. Horton compliments Steve. (Her behavior is influenced by observing the consequences of another person's behavior. She is displaying a behavior she observed in Steve. Steve is serving as a model for Ann.)

5. Jeff observes emotion displayed in the film, and this *arouses an emotion in him*. (Not necessarily the same emotion that he observed.) Emotional arousal is one possible outcome of modeling. Since Jeff was watching a film and not a live person, it was a form of symbolic modeling.

6. Seeing the other couples dance *facilitated existing behavior* in Fred. Her

comment, "You're such a good dancer," indicates that he didn't need to learn a new behavior, and though her enthusiasm might have aroused an emotion, an emotional arousal effect wouldn't explain why he wanted to dance. Strengthening or weakening inhibitions typically refer to socially unacceptable behaviors, such as crossing a street against a red light.

7. The non-occurrence of an expected reinforcer for the first assignment served as a punisher for the second assignment, so your behavior was reduced (you exerted less effort).

8. In information processing, attention is the beginning point of learning. The sound of our names is an important attention getter. (This explains why we don't react to "white noise" until something makes us consciously attend to it.)

9. Mrs. Amos realized that students' working memories could easily be overloaded, and she teaches the way she does in an effort to avoid exceeding the students' working memory capacities.

10. As a result of our past experience, we don't expect to see two "the's" in the phrase, so our perception of it is simply "a bird in the hand is worth two in the bush."

11. Henry was attempting to help the students make the information meaningful by preparing an organizer for them and by putting them in an active role in the process.

12. The review attempts to capitalize on *elaboration* as way of making information meaningful. The learners will elaborate from the previous day's discussion to the information that is being covered today.

13. He had encoded Katherine's name in the context of his class, and the social event was a different context, so he had difficulty retrieving her name in that context.

14. Stand up in front of the class on both feet and then on one foot. Have the students compare the force you exert on the floor and the amount of area you're standing on in both cases. Lead them to conclude that you exert twice as much pressure on one foot as you do on two feet. This process provides the most concrete and complete illustration of the concept.

15. By writing the answers Marisa puts herself in a more active knowledge construction role than does Helen. Helen studies more passively, so the knowledge she constructs is less meaningful to her.

UNIT II: MULTIPLE INTELLIGENCES

THE LEARNER WILL BE ABLE TO:

- ✓ **Comprehend the theory of multiple intelligences.**
- ✓ **Identify the eight intelligences with visual and written clues.**

MULTIPLE INTELLIGENCES

Multiple intelligence is a theory of learning developed by Howard Gardner to explain the variety of intelligences in humans that can be measurably demonstrated. Although Gardner believes there are many types of intelligences, he has identified eight specific ones: naturalist, verbal/linguistic, logical/mathematical, visual/spatial, bodial/kinesthetic, musical, interpersonal and intrapersonal. Gardner explains that intelligence can be either a means to solving a problem, creating a product or inventing a new problem to facilitate new learning.

INTELLIGENCE

"A set of problem-solving skills, enabling the individual to resolve genuine problems or difficulties that he or she encounters and when appropriate, to create an effective product; the potential for finding or creating problems, thereby laying the groundwork for the acquisition of new knowledge."

Howard Gardner

- **Naturalist intelligence**
  is seeing patterns and connections in nature

- **Language based intelligence**
  is related to how we use words

- **Logical/mathematical intelligence**
  is tied to the use of numbers and organization

- **Visual intelligence**
  involves both the eye and the brain in seeing and perceiving visual and spatial relationships.

- **Musical intelligence**
  can be both creative and mathematical involving both hemispheres of the brain.

- **Kinesthetic intelligence**
  involves movement and doing

- **Interpersonal intelligence**
  requires relationship

- **Intrapersonal intelligence**
  is reflective and individualistic

We are seeing that people possess a variety of intelligences. Does this mean that we must find out what kind of intelligence each of our students have? Not at all. However, **by knowing that we do not all learn in the same way, we can include a variety of approaches when teaching a difficult concept in order to engage the intelligences of all our students.**

VERBAL/LINGUISTIC PEOPLE

- like to read books
- enjoy having a love affair with words
- taking, talking, talking
- like to write
- enjoy word games
- usually do well in traditional schools

Examples: poets, lawyers, advertising writers, politicians

VISUAL/SPATIAL PEOPLE

- make movies in their heads
- enjoy video games, movies & TV
- understand maps and globes
- enjoy painting, coloring
- like taking pictures or videos of events
- want to be shown
- like jigsaw puzzles

Examples: pilots, architects, sculptors

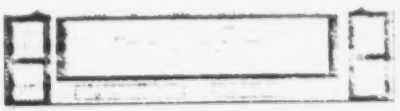
LOGICAL/MATHEMATICAL PEOPLE

- love numbers
- are good at mathematics
- see patterns in things
- like to figure out puzzles
- are usually good with money
- enjoy statistics

Examples: mathematicians, programmers, scientists

BUT HOW DOES THIS APPLY TO THE ADULT EDUCATION CLASSROOM?

Perhaps a little shopping trip will help us see how Gardner's theory can be useful to us

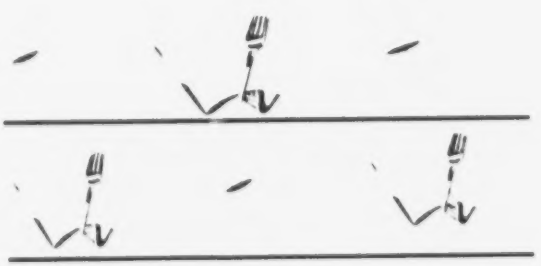


Imagine that you are shopping in a new department store. It is called Al's Orderly Operation because Al is a neat freak and refuses to allow any merchandise to get out of order. Let's go in and see his setup

Here we are on the **first floor** and what catches our eye? It's the big **parachute** suspended from the ceiling right over the elevator

Well, we have gone up to the **second floor** and as the elevator opens we see that we are in the big men's shop and right in front of us are two pairs of **extra large pants**

Our next stop is **third floor** housewares. It looks like Al is not as orderly as he thinks. Here on the shelves are **mugs and dishes.** However, one shelf has the mugs first and the next shelf has the dishes first. Could it be that it really doesn't matter?



Finally, we are at the top on the **fourth floor**. What a beautiful roof-top restaurant! The special of the day is fresh fruit. On each table Al has placed a bowl of **apples and strawberries** or is it **strawberries and apples?** I guess we'll just eat whichever we get to first

Let's see how much of our story we can remember.

- What was the name of the store?
- When we walked in, what was hanging over the elevator?
- In the Men's department, what did we find?
- As the elevator reached the third floor, what was arranged on the shelves?
- What was the special of the day in the roof-top restaurant?

Now see how our story relates to upper level math.

- parentheses
- exponents
- multiplication and division (do whichever comes first) 5+3x6=? (5+3)x6=?
- addition and substraction (do whichever comes first) 5+18=23 8x6=48

This is the order of operations for algebra:
a very important rule when working with equations

parachutes	**= parenthesis**
extra large pants	**= exponents**
mugs and dishes	**= multiplication and division**
apples and strawberries	**= addition and subtraction**

If we follow the correct order, we can come to the correct answer. By keeping the picture and story in our minds, we can more easily remember the order and the logic of the mathematical rule.

Tapping into verbal, mathematical, and visual intelligence makes this a lesson that is more difficult to forget.

Here are some other types of intelligences students may posses

INTERPERSONAL PEOPLE

- **enjoy being with others**
- **work well in groups**
- **process information collectively**
- **are concerned with the feelings of others**
- **enjoy team sports or games**
- **like to socialize**

INTRAPERSONAL PEOPLE

- **process information individually**
- **enjoy quiet times alone**
- **are independent or "strong willed"**
- **enjoy projects or hobbies they can do by themselves**
- **are often non-conformists**
- **often retreat to an inner world**

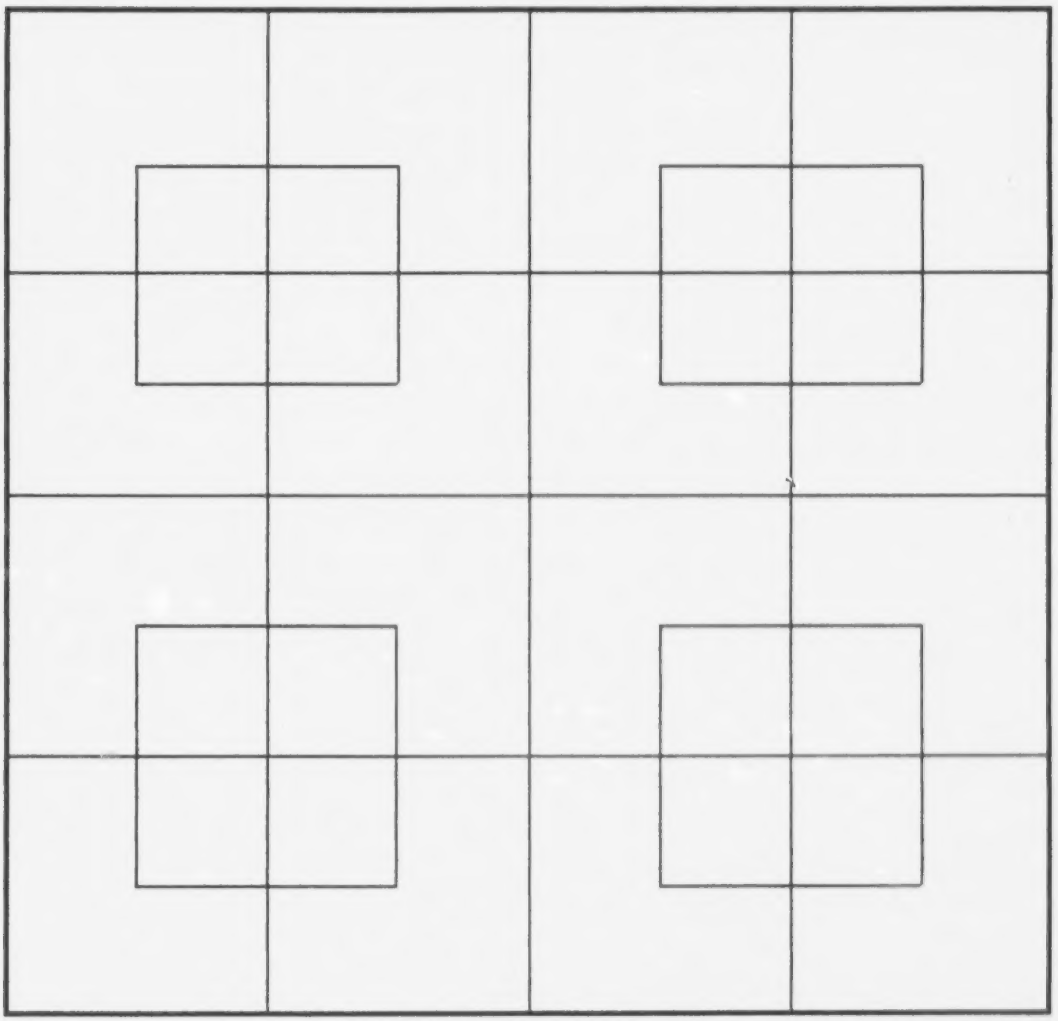
WHY DO SOME JUST TALK, TALK, TALK WHILE OTHERS DO NOTHING BUT COMPLAIN THEY CAN'T STAND THE NOISE?

Do you have this mix of students in your classroom? Could it be that some process information through their interpersonal intelligence (discussing, questioning and sharing information) while others need quiet times to reflect and concentrate with their well-developed intrapersonal intelligence?

While earplugs often benefit those who prefer a quiet environment, opportunities to work in groups or with partners may help others. Some people find working together increases their ability to understand. Others have a hard time comprehending and they are unable to process information by themselves.

Take a moment for a short exercise on interpersonal and intrapersonal intelligence.

- Count the number of squares. Find two others who will do the same.
- Allow two minutes to complete this exercise.
- Now try exercise again with two partners.
- How did you feel with the first try?
- Were their any differences when you worked in a group?
- Were you more successful alone or in the group?



(Answer found on page 29)

The following two intelligences described by Gardner are often never tapped in the traditional classroom above second-grade level. Incorporating ways adult learners can use these intelligences is often a challenge. However, by doing just that, a great result may be reaped

MUSICAL PEOPLE

- **can duplicate notes and pitch**
- **love to sing**
- **enjoy listening to music as they work**
- **like to play musical instruments**
- **understand the relationship between notes**
- **can clap in rhythm**

BODIAL/KINESTHETIC PEOPLE

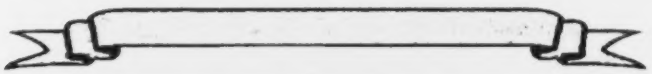
- **enjoy hands on learning**
- **excel at sports**
- **like to take things apart**
- **move around a lot**
- **process information by feelings**
- **need to touch**
- **are often skillful craftsmen**

LET'S REVIEW GARDNER'S THEORY OF MULTIPLE INTELLIGENCES

Using this simple exercise to review Howard Gardner's theory and to help it become a part of your long term memory:

Using our kinesthetic intelligence we could:

1. shake leaves off a tree for **naturalist**
2. touch our tongues for **verbal/linguistic**
3. count our fingers for **logical/mathematical**
4. make some glasses for **visual/spatial**
5. touch our toes for **kinesthetic**
6. sing la la la for **musical**
7. shake the hand of a neighbor for **interpersonal**
8. think a happy thought and smile for **intrapersonal**



Howard Earl Gardner (b. Scranton, Pa., July 11, 1943), psychologist and neurologist, since 1972 has been co-director of the Harvard Graduate School of Education's Project Zero, an investigation of artistic knowledge and education. In *Frames of Mind* (1983), Gardner developed a theory of "multiple intelligences," claiming that conventional tests measure only a small set of a person's capacities. He theorizes that there are eight different forms of intelligence: naturalist, logical/mathematical, verbal/linguistic, bodial/spatial, musical interpersonal and intrapersonal. He has developed these ideas further in studies of creativity such as *Multiple Intelligences* (1993) and *Creating Minds* (1993).

Capelli, Glen, Super Teacher. South Perth, WA: CAPA PTY LTD (1990)

Gardner, Howard, Frames of the Mind: the Theory of Multiple Intelligences. New York: Basic Books (1983)

Johnson, David W., Cooperative Learning in the Classroom. Edina, MN: Interactive Books (1991)

Lazear, David, Seven Ways of Knowing. New York: Skylight Publishers (1991)

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Answer to exercise on page 25:

41 squares

UNIT III: LEARNING DISABILITIES

THE LEARNER WILL BE ABLE TO:

- ✓ **Understand how a learning disability is defined.**
- ✓ **Understand what characteristics are commonly found in students with learning disabilities.**
- ✓ **Understand the evaluation process in diagnosing a learning disability.**
- ✓ **Implement practical strategies in the classroom to maximize the functioning of individuals with learning disabilities.**

ADULT LEARNERS AND LEARNING DISABILITIES

Although much has been written in educational literature about learning disabilities, it is a topic about which many classroom teachers know little. What they do know is that they have students in their classrooms who are motivated and who appear to be intelligent but who cannot seem to grasp the material they need to learn. They make mistakes in their reading. They can't seem to follow oral instructions. They can do a math problem today and not be able to do it tomorrow. Some are disorganized, losing papers or forgetting to complete them, not remembering dates. Others talk fluently about a subject, can organize an essay so that it has logic, and then write a paper full of misspelled words and incomplete sentences. Teachers cannot dismiss these students. They need to understand what is happening, and they need to find a way to help them learn.

Students like these might belong to the millions Americans who have an identified disability. Those disabilities include physical disabilities, such as deafness, and learning disabilities, such as an inability to process written language. Many of these adults do not have a high school diploma and are unemployed. Some researchers estimate that as many as 80% of the students in Adult Basic Education classes are learning disabled. Among the GED candidates, as many as 7% are formally disclosing that they have a disability. It is easy to assume that adult education teachers will have a disproportionate number of students facing challenges and that many of those challenges will be of a learning nature.

Learning disabilities are usually permanent, frustrating, and inconsistent. They affect the manner in which individuals with normal or above average intelligence take in, retain, and express information. The processing problem can scramble the information as it travels between the eye or ear and the brain. Their learning problems are often inconsistent, students may be affected one day and not the next. Thus, students may spell Tuesday as 'Tuzdey' one day and as 'Tuesday" the next. Moreover, the characteristics which can be identified with one learning disabled student many not be true for the next. It is easy to understand the frustration experienced by both the learner and the teacher. Teachers will probably have a difficult time identifying the disability, crediting the errors of one day to a student's unwillingness to carefully proof a paper before turning it in rather than attributing them to a disability. The teacher will find himself praising a student for seeming to understand the material today and wondering why the same student performs so poorly on his test. The law prohibits teachers from candidly asking a student if he or she is learning disabled. The teacher, of course, must work with that student with or without an acknowledgment of a disability.

Adults with learning disabilities who enter an adult education classroom usually have low self-esteem. This is usually the result of years of being criticized, put down and even berated for being unable to succeed in academic or vocational programs. They learn to protect themselves by not risking, they are less likely to strive to reach their potential. All too often,

learning disabled students are viewed as lazy, dumb and unmotivated, but the reality is often the opposite.

The following information provides an accepted definition of learning disabilities. It identifies common characteristics of learning disabled adult students and offers suggestions for teaching learning disabled students.

A DEFINITION OF LEARNING DISABILITIES

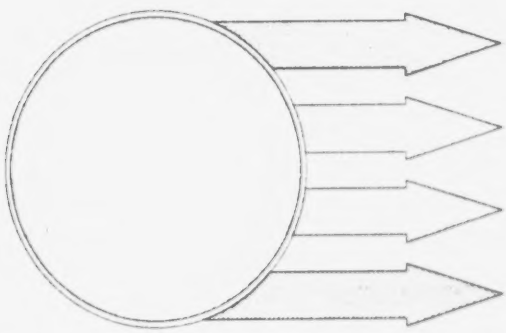
Learning disabilities is a general term that refers to a heterogeneous group of disorders manifested by significant difficulties in the acquisition and use of listening, speaking, reading, writing, reasoning or mathematical abilities. These disorders are intrinsic to the individual and are presumed to be due to central nervous system dysfunction. Problems in self-regulatory behaviors, social perception, and social interaction may exist with learning disabilities but do not by themselves constitute a learning disability. Although learning disabilities may occur concomitantly with other handicapping conditions (for example, sensory impairment, mental retardation, serious emotional disturbance) or with extrinsic influences (such as cultural differences, insufficient or inappropriate instruction), they are not the result of those conditions or influences.

Based on this definition, we know that a learning disability (LD) is a gap among intellect, achievement and aptitude. We might have in class an individual who seems very smart, and based on that person's intelligence, we can logically expect that his or her level of achievement in academic areas will be somewhat commensurate with that ability. But what we see is a gap - and that gap is what defines a learning disability. For example, the average IQ that we expect the general population to have is 100. When we test students' achievements - test the way they read, how they do math, how they do written language, and how they process information - we derive a score, called a standard score, which can be compared directly to the IQ score. For the average student, we can expect that standard score to be comparable to the IQ score. For example, if we have a student with the average

100 IQ, and we test his reading, we are going to presume that he is going to get a reading score that's going to be close to 100. If the score is a 98, that is not considered a gap. But if the point spread is 22 points, that is labeled a learning disability. Also, a student could score a 98 on reading and a 71 on math. While that student is not considered learning disabled in reading, he would be considered learning disabled in math.

In addition to the gap between achievement and ability, a learning disabled (LD) student must have a processing problem. This means that the individual has some problem getting the information in and spitting it out again. Processing problems might be visual or auditory; they might be in relation to memory. For example, the student may reverse letters when he reads or consistently substitute words when reading. He might consistently place numbers in the left column rather than the right. The student often can talk through the problem correctly but is unable to correctly write it out on paper.

Finally, LD students will often have problems in their social interactions. They may consistently disrupt others when speaking; they may be unable to distinguish praise from criticism. As a result, many learning disabled students may not join in group activities or may appear to be "loners."



COMMON CHARACTERISTICS OF LEARNING DISABLED STUDENTS

READING SKILLS	
1.	Slow reading rate and/or difficulty in modifying reading rate in accordance with material difficulty
2.	Poor comprehension and retention
3.	Difficulty identifying important points and themes
4.	Poor mastery of phonics, confusion of similar words, difficulty integrating new vocabulary

WRITTEN LANGUAGE SKILLS	
1.	Difficulty with sentence structure (i.e., incomplete sentences, run-on's, poor use of grammar, missing inflectional endings)
2.	Frequent spelling errors (i.e., omissions, substitutions, transpositions), especially in specialized and foreign vocabulary
3.	Inability to copy correctly from a book or the blackboard
4.	Slow writer
5.	Poor penmanship (i.e., poorly formed letters, incorrect use of capitalization, trouble with spacing, overly-large handwriting)

ORAL LANGUAGE SKILLS	
1.	Inability to concentrate on and comprehend oral language
2.	Difficulty in orally expressing ideas which he/she seems to understand
3.	Written expression is better than oral expression
4.	Difficulty speaking grammatically correct English
5.	Cannot tell a story in proper sequence

MATHEMATICAL SKILLS	
1.	Incomplete mastery of basic facts (i.e., mathematical tables)
2.	Reverses numbers (i.e., 123 to 321 or 231)
3.	Confuses operational symbols, especially + and x
4.	Copies problems incorrectly from one line to another
5.	Difficulty recalling the sequence of operational processes
6.	Inability to understand and retain abstract concepts
7.	Difficulty comprehending word problems
8.	Reasoning deficits

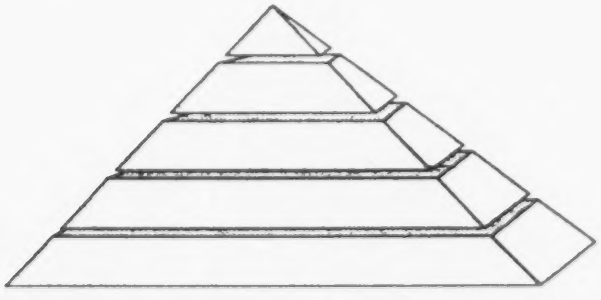
ORGANIZATIONAL AND STUDY SKILLS
1. Time management difficulties
2. Slow to start and complete tasks
3. Repeated inability on a day-to-day basis
4. Difficulty following oral and written directions
5. Lack of overall organization in written notes and compositions
6. Demonstrates short attention span during lectures
7. Inefficient use of library reference materials

SOCIAL SKILLS	
Some LD adults may have social skills problems due to their inconsistent perceptual abilities.	
VISUAL PERCEPTION	AUDITORY PERCEPTION
For the same reason that a person with visual perceptual problems may have trouble discriminating between the letters "b" and "d," he/she may be unable to detect the difference between a joking wink and a disgusted glance.	People with auditory perceptual problems might not notice the difference between sincere and sarcastic comments, or be able to recognize other subtle changes in tone of voice.
These difficulties in interpreting nonverbal messages may result in lowered self-esteem for some LD adults, and may cause them to have trouble meeting people, working cooperatively with others, and making friends.	

SUGGESTIONS FOR ADULT STUDENTS WITH LEARNING DISABILITIES

1.	**If you know that you have a learning disability and can substantiate your claim, talk to your instructors *before* the class begins.**
2.	**If you think that you may have a specific learning disability, but aren't sure, contact the learning skills center or disabled student services office.**
3.	**Set realistic goals and priorities for course work.**
4.	**Keep only one calendar with all relevant dates, assignments and appointments.**
5.	**Use a tape recorder during lectures. Selectively tape-record key points using the "pause" switch.**
6.	**Listen to the tape as soon after class as possible to refresh your memory, then reorganize your notes.**
7.	**Make notes of any questions you might have so that they can be answered before the next exam.**
8.	**Sit toward the front of the classroom to maximize your eye contact and to reduce distractions.**

9. Estimate how long a given class assignment will take, generally planning on two hours outside of class for every hour in class. Build in study breaks, as fatigue is a big time waster.
10. If you are having trouble, seek support help early in the semester.
11. Your instructors may permit use of simple calculators, scratch paper and spellers' dictionaries during exams.
12. Your instructors should provide adequate opportunities for questions and answers, including review sessions.
13. Your instructors may select a textbook with an accompanying study guide for optional student use.
14. Use your schools's/institution's support services (i.e, pre-registration, assistance in ordering taped textbooks, alternative testing arrangements, specialized study aids, peer support groups, diagnostic consultation, study skills, development training, academic tutorial assistance).



STRATEGIES/ACCOMMODATIONS FOR STUDENTS WITH LEARNING DISABILITIES

ACADEMIC

1. Modified and/or reduced workload
2. Simplified or alternative workload
3. Multisensory presentation
4. Color coded assignment sheets
5. Tape recorder/books on tape
6. Calculators/spell checks
7. Computer literacy
8. Extended time allowance
9. Peer buddy/tutor
10. Reader services
11. Flexible evaluation scales
12. Notetakers
13. Help sessions
14. Highlighters/bookmarks
15. Graph paper
16. Alternative test formats (multiple choice, essay, etc.)
17. Allow test-taking in a separate room
18. Study guides
19. Sample tests
20. Work samples
21. Outlining and summarizing course material
22. Reviewing previous material and giving overview of new topics
23. Allowing time for questions and answers
24. Noticing and responding to non-verbal signs of confusion or frustration

ATTENTIONAL

1 Preferential seat placement
2 Role models
3 Analyze distractions in environment/assess need for stimulation
4 Intersperse high and low interest work/frequent breaks
5 Allow for movement/ "Don't sweat the small stuff"
6 Reduce course load
7 Assist with goal setting
8 Extended time allowances
9 Note takers
10 Peer buddies
11 Physical cuing/body language
12 Keep structure/avoid change
13 Simplify directions
14 Break down tasks
15 Organize/make lists
16 Monitor work

ORGANIZATIONAL

1 Encourage structure calendars, planners, separate notebooks/dividers, etc
2 Provide specific rules
3 Classroom tools paper, pencils, etc
4 Goal setting/time lines
5 Use communication system with student
6 Word processing
7 Highlighters/color coding

SOCIAL/EMOTIONAL

1. Focus on positives not negatives
2. Allow student to experience success
3. Avoid frustration
4. Bond

STUDENT SELF-ADVOCACY

1. Register with disability support service
2. Join support group
3. Disclose/communicate with instructors
4. Register early
5. Reduce workload/course load
6. Get tutor
7. Welcome support
8. Study creatively
9. Select best seat placement
10. Use lists, calendars, planners to stay organized
11. Ask questions
12. Use technology/spell checkers, etc
13. Take a study skills course
14. Be proactive in studying/don't wait until the last minute/pace yourself
15. Set realistic goals
16. Use incentives

SUGGESTIONS FOR HELPING ALL STUDENTS SUCCEED IN THE CLASSROOM

1. Clearly spell out expectations before course begins (i.e., grading material to be covered, due dates).

2. Speak directly to students and use gestures and natural expressions to convey further meaning.

3. Give assignments both orally and in written form to avoid confusion.

4. Present new or technical vocabulary on the blackboard or use a student hand-out. Terms should be used in context to convey greater meaning.

5. Begin class by outlining material to be covered that period. At the conclusion of class, briefly summarize key points.

6. Announce reading assignments well in advance for students who are using taped materials.

7. Facilitate use of tape recorders for note taking by allowing students to tape the class.

8. Provide study questions for tests that demonstrate the format as well as the content of the test. Explain what constitutes a good answer and why.

9. If necessary, allow LD students to demonstrate mastery of course material using alternative methods (i.e., extended time limits for testing, oral exams, taped exams, individually proctored exams in a separate room).

10. Permit use of simple calculators, scratch paper and spellers' dictionaries during tests.

11. Provide adequate opportunities for questions and answers, including review sessions.

12. If possible, select textbooks with accompanying study guides for optional student use.

13. On self-paced work, provide directions in a clear format, preferably using a multi-sensory presentation. Help students "chunk" work and set realistic expectations for completion.

14. Encourage students to use available support services (i.e., pre-registration, assistance in ordering taped textbooks, alternative testing arrangements, specialized study aids, peer support groups, diagnostic consultation, study skills, academic tutorial assistance).

SOURCES OF ADDITIONAL INFORMATION

Special Arrangements

With appropriate documentation, students with LD are eligible to take the SAT or ACT under nonstandard testing arrangements. They also are eligible to receive recorded textbooks through Recording for the Blind.

SAT

Students with LD may take the SAT on an extended-time basis. The test may be administered up to six hours per day for two consecutive days. As an alternative to the regular-type format, a large-type format or a cassette format for the verbal parts of the test may be substituted. To be eligible, students must have on file at their school an Individualized Education Program (IEP) or two recent documents from any of the following: physician, psychologist, child-study team, or learning-disability specialist. The documentation must indicate a need for modified testing arrangements.

Interested students should request a copy of ATP *Services for Handicapped Students*. This publication and additional information is available from:

Educational Testing Service
ATP Services for Handicapped Students
P.O. Box 6226
Princeton, NJ 08541-6226

ACT

As for the SAT, students with LD may take the ACT on an extended-time basis (up to twelve hours) and may use a large-type or cassette format instead of a regular-type format. Students requesting special testing must have been diagnosed by a qualified professional such as a learning-disability specialist or psychologist. This testing and the resulting documentation must have been completed within the last three years. Interested students should obtain the

most recent edition of Request for ACT Assessment Special Testing. This publication and additional information is available from:

ACT
2201 North Dodge Street
P.O. Box 168
Iowa City, IA 52243

Recording for the blind (RFB)

RFB is a nonprofit organization that serves as a lending library for educational books already recorded and as a recording service for additional titles. Their master tape library contains a diversity of textbooks. Documentation of a learning disability must include results of intellectual, information processing, and achievement tests. Students interested in using these services should send for the publication *A Guide to Using Recording for the Blind's Services*. This publication and additional information is available from:

Recording for the Blind
20 Roszel Road
Princeton, NJ 08540
609-452-0606 or 800-221-4792

Organizations

More information about programs and services for adults with LD may be obtained from these organizations:

Association on Handicapped Student Services Programs Post-Secondary Education (AHSSPPE)
P.O. Box 21192
Columbus, OH 43221
614-488-4972

Center on Postsecondary Education for Students with Learning Disabilities
The University of Connecticut, U64
249 Glenbrook Road
Storrs, CT 06269-2064
203-486-4036

Council for Exceptional Children (CEC)
1020 Association Drive
Reston, VA 22091-1589
703-620-3660

Council for Learning Disabilities (CLD)
P.O. Box 40303
Overland Park, KS 66204
613-492-8755

HEATH Resource Center
(Postsecondary Education for Individuals with Disabilities)
One Dupont Circle, Suite 800
Washington, DC 20036-1193
202-939-0320 or 800-544-3284

Information Center for Individuals with Disabilities (ICID)
20 Park Plaza, Room 330
Boston, MA 02116
617-727-5540

International Reading Association (IRA)
800 Barksdale Road
P.O. Box 8139
Newark, DE 19714
302-731-1600

Launch, Inc
Department of Special Education-ETSA
Commerce, TX 75428
214-886-5932

The Learning Disabilities Consortium
Piedmont Community College
P.O. Box 35009
Charlotte, NC 282235
703-342-6621

Learning Disabilities Network
25 Accord Park Drive
Rockland, MA 02370
617-982-8100

Learning Disability Association
(formerly ACLD)
4156 Library Road
Pittsburgh, PA 15234
412-341-1515

National Center for Learning Disabilities
99 Park Avenue, 6th Floor
New York, NY 10016
212-687-7211

National Easter Seal Society (NESS)
70 East Lake Street
Chicago, IL 60601
312-726-4258

National Information Center
For Children and Youth with Disabilities
P.O. Box 1492
Washington, DC 20013
703-893-6061

National Library Service for the Blind and Physically Handicapped
1291 Taylor Street, NW
Washington, DC 20542
202-287-5100 or 800-424-8567

National Network of Learning Disabled Adults
808 N. 82nd Street, Suite F2
Scottsdale, AZ 85257
602-941-5112

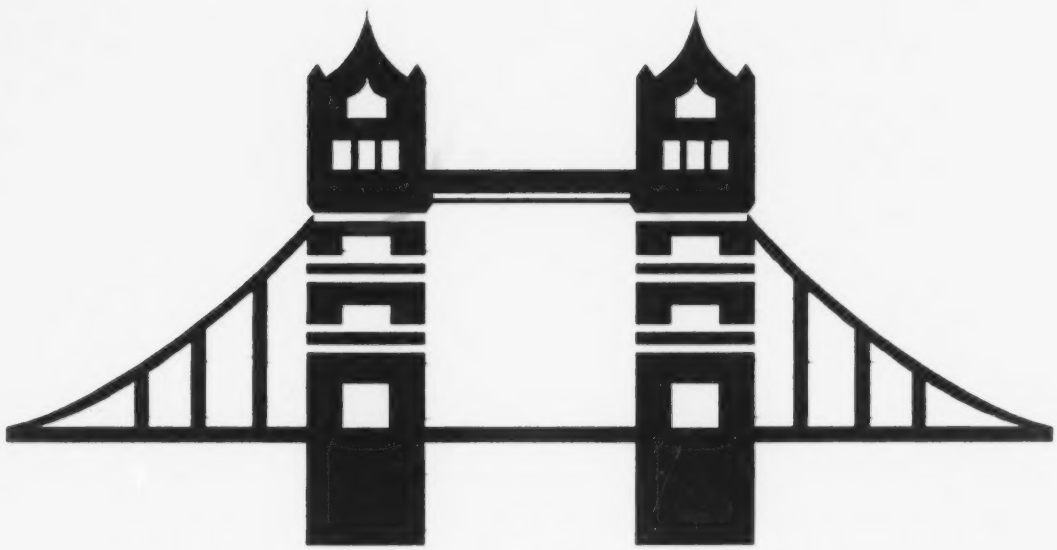
Orton Dyslexia Society (ODS)
724 York Road
Baltimore, MD 21204
301-296-0232 or 800-222-3123

Parent Information Center
P.O. Box 1422
Concord, NH 03302
603-224-7005

Partners in Publishing
P.O. Box 50347
Tulsa, OK 74150
918-584-5906

President's Committee on Employment of the Handicapped
1111 20th Street, NW, Room 600
Washington, DC 20036
202-653-5010

Time Out to Enjoy (TOTE)
P.O. Box 1084
Evanston, IL 60204



UNIT IV: ACCELERATED LEARNING

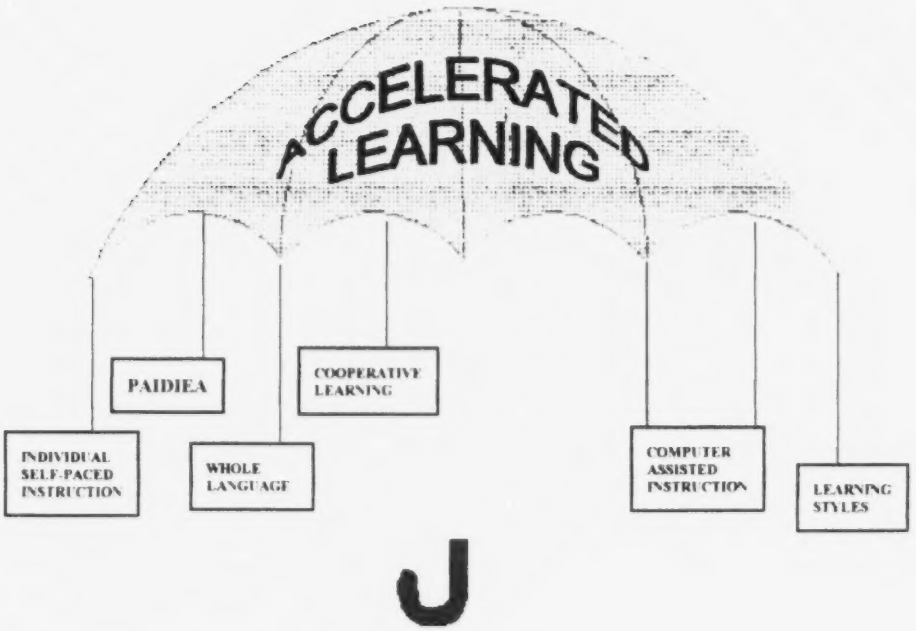
THE LEARNER WILL BE ABLE TO:

- ✓ **Define the accelerated learning teaching approach.**
- ✓ **Know the mental activities of the left and right brain hemispheres.**

ACCELERATED LEARNING

How can we increase the depth, breadth, and speed of learning? How can we build self-esteem and help our students use their full potential? How can we make learning fun and avoid conflicts and fears that often arise in the traditional classroom? Accelerated Learning may be the answer. Based on a multi-sensory approach to learning, accelerated learning incorporates varied strategies in order to engage the learner in meaningful activities. This brain-based approach takes into account the work of such experts as Marian Cleeves Diamond, Howard Gardner and Mortimer Adler. This method attempts to involve students with many types of intelligences in more than one way in order to produce a whole-brain effect that facilitates increased learning. For students who have had little success in the academic world, this method can be a real breakthrough.

AN UMBRELLA OF IDEAS

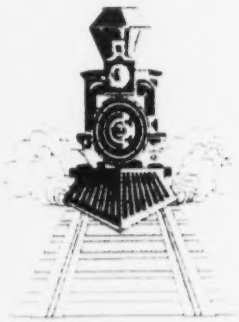


Accelerated learning is an umbrella term given to a variety of theories and strategies that engage the learner enough to increase the depth, breadth, and/or speed of learning. Perhaps the one thing that each of these theories and strategies has in common is that they involve what has recently been termed brain-based learning, learning that incorporates new information on how the brain works.

Accelerated learning takes a multi-sensory approach in order to improve retention. In the past fifteen years tremendous breakthroughs have come in the area of brain research. We are now aware that not only do the two hemispheres of the brain control movement on opposite sides of the body but different kinds of mental activity. Each of us is different. Therefore, we use our brains differently.

THE LEFT BRAIN

- *LOGIC*
- *WORDS*
- *NUMBERS*
- *LISTS*
- *LINEAR THINKING*
- *ANALYSIS*



THE RIGHT BRAIN

- *IMAGINATION*
- *COLOR*
- *SPATIAL AWARENESS*
- *RHYTHM*
- *DAY DREAMING*
- *GLOBAL THINKING*

The left side of the brain controls the linear and logical thinking. Learners move in an orderly fashion when functions are on this side of the brain just like a train going along a track from station to station. Words and numbers are found here helping us to organize our thoughts and lives.

The right brain controls our global thinking or our ability to see the whole picture. We can zoom back and see how different parts of things fit together. Our creativity sparks from this side of our brain along with all of those many colorful images we have roaming around in our heads.

PUTTING IT ALL TOGETHER

When we get both sides of our brain working together, we can speed up learning. By providing a multi-sensory approach to learning, we can insure that we engage both sides of the learner's brain.

A MULTI-SENSORY APPROACH

IF WE
SEE IT
HEAR IT
FEEL IT
SMELL IT
TASTE IT
WE REMEMBER IT

By varying the approaches to learning, we can incorporate more of the senses, thus improving retention. We remember only a small part of what we hear or read, a greater portion of what we see, more of what we are actively involved in doing Combine them all and you accelerate learning If we recognize that our students are not all gifted in the same way, that each one has his/her own very special blend of intelligences, it is easy to see why using a varied approach will allow the learners to process information using their strengths

According to Howard Gardner *(Theory of Multiple Intelligences)*, traditional schools reward two intelligences far above the others and therefore hinder the creativity and learning of students who may not possess these types of intelligence Perhaps the following story will better illustrate this point

FAIR IS NOT ALWAYS FAIR

The Story of the McGill Family: Why We Need to Look at Students as Individuals

When Mr. and Mrs. McGill were married, they decided to have a large family. "All girls," said Mrs. McGill. "All boys," said Mr. McGill. "Then we'll have four of each," said Mrs. McGill. "Good," said Mr. McGill, "Fair's fair."

One night when the oldest McGill child was seventeen and the youngest was two, Mr. and Mrs. McGill were awakened by a terrible noise. All the children were coughing. "Well," said Mrs. McGill, "I must make up some of my mother's honey and lemon juice. Mother always used that for a cough." "Good," said Mr. McGill, "and we'll give it to all of them; fair's fair." So they did, and only the fourth McGill stopped coughing. The next morning everyone was very tired because they could not sleep with seven coughing children. "I believe we must take the children to the doctor," said Mrs. McGill. "You're right," said Mr. McGill. "We'll take them all; fair's fair." And so they did.

The doctor examined all the children. Then he called Mr. and Mrs. McGill to his office. "This is very unusual," he said. "Your children all have different illnesses. The oldest McGill has an irritated throat. He should stop smoking. The second McGill has a cold. Just wait and she'll get better. The third McGill has intestinal worms. He needs some medicine. The fifth McGill has an allergy. Take away her feather pillow. The sixth McGill has pneumonia. He should be hospitalized and treated with antibiotics. The seventh McGill has tuberculosis and should be treated in a sanitarium. The youngest McGill has asthma. You should move to Arizona.

"Well," said Mrs. McGill, "whatever shall we do?" "We'll take the children home and think about this," said Mr. McGill. "We must decide on the fair thing for everyone."

The McGills thought and thought, and finally, they decided on a plan that would be fair to everyone. They would move half way to Arizona, give each child half a penicillin shot and half a dose of worm medicine, take away all the cigarettes and pillows and just wait for them to get better. And so they did.

The first, second and fifth McGill children got better, the third and eighth continued to cough but learned to do it quietly, and the sixth and seventh McGill children died.

"Well," said Mrs. McGill, "it is too bad about the children, but isn't it nice not to hear coughing at night anymore?" "Yes, said Mr. McGill, "and no one can say we weren't fair. And fair's fair."

As you can see, always treating someone fairly can have disastrous results. **With accelerated learning theory, the individual and his uniqueness is always considered. The whole brain multi-sensory approach to learning means tapping into the resources each person has and valuing his learning.**

Brain-based Learning

Connect learning to something students already know. By increasing the connections students have to their learning, we can insure greater recall of information. Accelerated learning makes use of word associations and acrostics to connect learning to a framework that can easily be remembered. Singing the prime numbers to a nursery tune can make memorization easier because as the brain accesses the familiar tune, a pathway has been made to the numbers also. Remembering a sentence like "King Henry Dates Uncle Dimi's Cousin Millie" can help a student recall the metric system: Kilo, Hecto, Deca, Units, Deci, Centi, Milli.

Building a Community of Learners

Methods such as cooperative learning and Paidiea attempt to share the knowledge and experiences of the entire class to tap into a greater wealth of information and experience. Students expand their own intelligences by using interpersonal skills to learn.

Self-Esteem: The Key to Learning

Most critical to the process of accelerated learning is the importance and value of the individual. Self-esteem is the one key that begins the cycle of accelerated learning. If a person can feel good about himself and his learning, it frees the brain from the anxieties that prevent learning from taking place. According to Glen Capelli, a calm brain is a brain more receptive to learning. If learning takes place, then self-esteem increases, and if self-esteem increases, then, more learning can take place. This is truly the key that unlocks accelerated learning.

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UNIT V: WHOLE LANGUAGE LEARNING

THE LEARNER WILL BE ABLE TO:

- ✓ **Understand the definition and purpose of Whole Language Learning, its general teaching approach and benefits to the adult learner.**
- ✓ **Understand the advantages of using volunteers in the classroom as tutors.**
- ✓ **Understand several whole language methods that can be taught to volunteers for classroom tutoring.**

I. INTRODUCTION

The concept of the "whole language" approach to reading and writing was begun in the late 1960's and further developed in the 1970's. It differs from traditional instruction in several ways. Traditional instruction begins with simple, usually small words or sounds to develop the skills necessary to read. Whole language begins with the whole (text, passage) and works toward the parts. Put simplistically, first we read *The Big Brown Bear*, then we look for the "B" words. This approach works very well with the adult learner. Ideally, the adult learner is brought into contact with relevant, functional print, often his own spoken words. Through the manipulation of familiar words, the adult keeps before him the realization of what the struggle is all about. Adults are not just decoding generic words; they're interacting with stories they've written for each other, letters from loved ones, a recollection from their own experiences, the boxes of food in their own cupboards, their automobile owner's manuals, etc.

Techniques of whole language include the language experience approach (LEA), creative writing exercises, dialogue journals, sustained silent reading, story telling, Request Procedure, Cloze Procedure, Guided Reading Procedure, Oral Reading, Echo/Duet Reading, Dictation Method, Transcription Method, Directed Writing Method, and Free Writing Method. There

are more methods and terms associated with whole language. Actually these methods are merely a beginning, as the whole language approach opens the door to as many procedures as time and creativity allow.

Whole language has been criticized as a approach that replaces phonics as a means of instruction. Although there has been controversy in recent years over which method should be emphasized with new readers, the whole language approach works particularly well with some adult learners because the texts used are functional, relevant to their own lives, and are often their own words.

II. TYPICAL ADULT LEARNER

The typical adult learner usually approaches reading with a history of failure from a negative school experience that can result in emotional blocks to learning. Being an adult brings a wealth of enrichment based on a lifetime of experiences. These general characteristics make whole language methods very successful in an adult education classroom.

First of all, the approach is new and different. Bad associations and memories of workbooks and reading classes are eliminated. The new approach produces hope. The atmosphere is informal, inviting and encourages the student to relax. This develops confidence and self-respect as each person's work is accepted and received as work worthy of being recorded and preserved in print.

III. PRACTICAL EXAMPLES/METHODS

Let's look at some examples that can be used with a group of students. The dictation method is an excellent way to begin and can easily be adapted to readers of all skill levels.

First, the student dictates a short passage relating to personal experience (a memory, daily activity, brief experience, thoughts on a subject, etc). The teacher (or volunteer) uses a marker and prints it word for word on a large sheet of paper. The teacher reads the story back to the student pointing to each word that the students repeats. The student then reads the story and the teacher helps as necessary. Next, the teacher points to the words randomly. This builds a sight word vocabulary. The teacher chooses a number of words from the passage that can be printed on flash cards. This will become the student's sight word vocabulary. In a later session, repeat the above procedure using a typed version of the exact story.

As you will see, the dictation procedure can provide the foundation for instruction in all the necessary traditional formats, and can be tailored to individual needs and skill levels.

Make a list of skills to be taught from the assessment scores (TABE, etc.) item analysis or student tracking sheets. Next watch for these skills to surface in dictation passages.

Examples:	Cause/Effect	"The dog ruined the sofa, so we gave him away."
	Suffixes	"She had a mysterious look."
	Vowel diagraph	"I am a good cook."

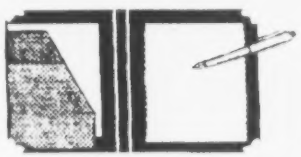
Use spin-offs from the words, sentences and stories. Have the students give examples from each other's stories.

As you will see, language skills can come to life for your students as they create their own curriculum. If it seems too time consuming, it may be more practical through the use of volunteers.

IV. PORTFOLIO

This method of evaluation requires each student's work to be kept in a portfolio. All written work should be kept here. This will provide an excellent basis for evaluation because the only comparisons will be of each person's work. Comments and observations should be kept

strictly positive: "You're taking more risks." "This paragraph is longer." "The meaning of this sentence is clear." Additionally, preserving your student's work in a portfolio is a good way to build confidence and to encourage more writing.



WHOLE LANGUAGE METHODS

Language Experience Approach (LEA)
(also known as dictation or transcription)

The student dictates a short passage that the instructor writes down word for word or tape-records (transcription method). This text is then used as the foundation for skill instruction.

Directed Writing

Focus is more on writing than reading. Beginning with highly-structured exercises such as one-word responses to questions or fill-in-the-blank exercises, students gradually increase the amount of writing they do (words, sentences, paragraphs).

Creative Writing or Free Writing

Working individually, students write about an experience - group or individual choice. The students write during class, helping each other with spelling, punctuation and sentence structure. The teacher can type and edit the writing to read and discuss during the next session.

Dialogue Journals

Student write entries and the teacher or other students respond. Text can be used to develop skill instruction or as a means of free expression.

Request Procedure

Builds the ability to comprehend. Involves exchange of learner roles. Helps learner develop predictive behaviors in reading.

Procedure: Instructor and learner read a pre-selected passage together silently. This selection is chosen for learner's interest and reading level. Instructor and learner take turns asking and answering questions about the passage. The instructor not only provides feedback for the learner, but also models good questioning techniques.

The Request Procedure can be a valuable tool to encourage the learner to think about the author's intent and to begin to make predictions about the text ("why do you think the author has the person...?")

Cloze

Improves comprehension, decoding skills, and vocabulary. Uses context clues to discover the deleted words in a passage.

Procedure: A cloze procedure deletes approximately 10-50 words from the total word passage of no more than 150 words. The deleted words are listed so that the learner may choose an appropriate word for each blank space. Materials should be preselected for the learner's independent reading level. The instructor can use written selections from textbooks, stories, poems or language experience stories.

Example: One of the most _____ things to consider when _____a camping trip is _____. You can _____take your shelter with you or _____it on the spot. For a short _____ in good _____, a sleeping _____ may be enough.

(Answers: important, taking, shelter, either, build, trip, weather, bag)

Guided Reading

Assists the learner's recall of specific information that was read. Improves the ability to

organize. Improves the ability to generate questions while reading.

Procedure: The instructor selects a narrative or informative reading that a learner can read comfortably in one sitting (approximately three to twelve minutes of silent reading, depending on the learners's level). The instructor prepares the learner for the assignment by explaining that it is important to try to remember as many details as possible from the chosen selection. The information recalled is written on the board or on paper. The learner returns to the material and checks for additional facts and corrects any inaccurately recalled facts. The instructor and the learner then organize the recalled material into an outline, locating more general statements and supporting details, as well as the sequence in which the material was presented.

Uninterrupted Sustained Silent Reading

Provides the learner with a quiet time to practice silent reading. Provides modeling of silent reading behavior.

Procedure: Emphasis is on preparation. Learners should be told that they can select any material they wish. The time frame is dependent on the length of time that the learner can sustain silent reading (from three minutes to ten minutes). Both the instructor and the learner read. The instructor is reading for pleasure, thus modeling this important behavior for the learner. This communicates the value of reading to the learner. There should be no interruptions while reading. No one should be asked to read aloud or report on what has been read.

Oral Reading

Provides the learner with practice in reading with expression to add meaning. Develops and enhances an appreciation for oral expression. Develops rhythmic sensitivity. Shows learners that poetry and other creative forms are enjoyable. Integrates speaking and listening.

Procedure: The instructor should model oral language form by first demonstrating self-expression. The instructor is making the learner less self-conscious. Materials selected should be interesting rhythmically and should require a sensitivity for mood and enunciation. Poetry and dialogue from plays should be taken into consideration when selections are made. Poems with considerable dialogue

readily lend themselves to two-part casting in which the instructor can take part.

Echo/Duet Reading

Increases fluency by exposing the learner to accurate reading patterns. Is a one-on-one tutoring function.

Procedure: In the beginning, the selection chosen should be at a level slightly lower than the material the learner is able to handle adequately. By using materials with which the learner is certain to experience success, the instructor makes the experience more positive for the learner. The instructor and the learner read the text aloud together (duet), or the instructor may read first, followed by the instructor and learner reading together (echo) line by line. The instructor's finger moves simultaneously along the line of print. The instructor should not, at any time, correct mistakes the learner makes. Echo reading should not be done for more than ten minutes during any one lesson, but should be done for several lessons consecutively.

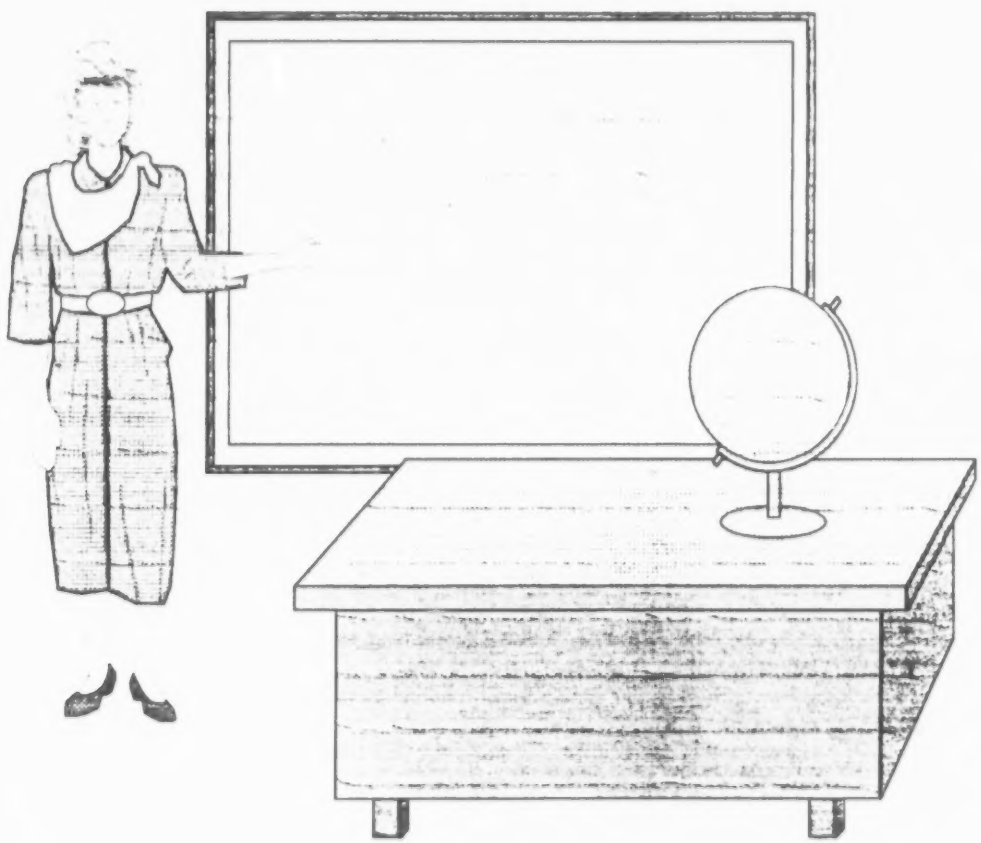
VOLUNTEERS IN THE CLASSROOM

Check with your program administrator to see if volunteers are available in your institution. If so, while many instructors use volunteers to help with grading papers, filing, making copies, and so on, we encourage you to consider their services as classroom tutors. Volunteer tutors, working one-on-one with adult students, have been particularly effective because they not only assist students with their academic lessons, but also help to achieve the motivation and self-confidence needed to persevere toward their goals.

Adult education classes are designed for one-on-one instruction, but one teacher can only provide so much assistance to each student. Volunteers enable students to get help at the moment when they are actively trying to understand something and are frustrated. Sometimes an adult student will relate more easily to a volunteer tutor than to the classroom teacher. Unlike the teacher who is responsible for the entire class, the volunteer tutor has more time

to get to know the learner. By being there and being interested in the learner's success, the tutor provides encouragement and confidence-building. He is helping the learner to crystallize his short and long range goals, and to understand the step-by-step process of achieving them.

The instructor will need to spend time preparing volunteers to tutor, but this investment will pay off many times over. In orienting and sensitizing volunteers who will work with adult students, you will enable them to see the importance of encouragement and your demonstration of instructional methods will enable them to be successful with the students.



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UNIT VI: COOPERATIVE LEARNING

THE LEARNER WILL BE ABLE TO:

- ✓ **Understand the basic goal of cooperative learning.**
- ✓ **Use it in an adult education classroom.**

WHAT is Cooperative Learning?

Cooperative Learning is instruction that involves people working in teams to accomplish a common goal, under conditions that involve both positive interdependence (all members must cooperate to complete the task) and individual and group accountability (each member is accountable for the complete final outcome).

WHY use Cooperative Learning environments?

Numerous educational reports and research articles indicate that students should be active, not passive, learners. Teachers are the critical players in the effort for shifting classroom instruction from passive learning strategies such as traditional lecture and rote learning to using more active learning strategies, specifically cooperative.

Results from a two-year study conducted at Florida Community College at Jacksonville found that:

- Student retention and academic success rates were significantly higher in cooperative learning classes based on statistical analysis.
- Students in cooperative learning classes showed a significant increase in critical thinking skills when compared with non-equivalent control groups.

- 52% of students surveyed indicated a 4 or 5 level of satisfaction on a scale of 1 to 5

HOW has Cooperative Learning changed the classroom environment?

Many classrooms have a new look, a new sound, and a new attitude about teaching and learning. Students in many classrooms are experiencing higher achievement, higher retention and greater satisfaction with their classes. Many are engaging in conversations about teaching and learning and are finding a new energy and a greater sense of satisfaction with their teaching.

Why? Cooperative Learning has changed the classroom into active/interactive centers of learning, and cooperative learning has provided teachers with the long-needed tools to structure an active leaning environment.

A dozen reasons why Cooperative Learning works:

1. Improves student achievement
2. Improves student retention
3. Increases critical thinking skills
4. Increases student satisfaction
5. Increases student/student interaction
6. Increases student/teacher interaction
7. Revitalized teachers
8. Provides instructors with a proven system for creating active/interactive classrooms
9. Encourages collegiality among teachers
10. Promotes energy and enthusiasm in the classroom
11. Builds a sense of community between campuses and courses
12. Prepares students for the new millennium where teamwork and interdependence will prevail

WHERE is Cooperative Learning modeled?

The Southeastern Center for Cooperative Learning provides an on-going effort to promote, research, explore and disseminate the practices, theories and strategies of cooperative

learning. Training seminars are held at a variety of locations. The Southeastern Center for Cooperative Learning works to provide a "model" center to be adapted to other educational institutions.

WHAT training is available?

Awareness Training (3-4 hours) introduction to the basic concepts of Cooperative Learning.

Foundations of Cooperative Learning (30-40 hours) provides a solid foundation for implementation in the classroom.

Advanced Concepts in Cooperative Learning (30-40 hours) provides advanced strategies for structuring cooperative groups.

For more information regarding training or information about the program and its research, contact:

Susan S. Hill, Program Director
(904) 646-2320 or Fax (904) 646-2312

Southeastern Center for Cooperative Learning
The Cooperative Learning Program
Florida Community College at Jacksonville
11901 Beach Boulevard
Jacksonville, Florida 32246

FIVE KEYS TO COOPERATIVE GROUPS*

Positive Interdependence - the success of the group depends on the participation of all the members. Members must have a reason for belonging in the group, so teachers should assign each member a role in the group's function.

Individual Accountability - Each person is responsible for his own share of the work load. The group is used to facilitate learning, but each individual is tested independently of the others. So, each person must perform to learn.

Group Processing - the group as a whole reflects on their successes or obstacles. They ask, "What have we learned? Where did we go wrong? What did we do right? What can we do better?" Oral discussions of these questions help students to grasp the answers.

Social Skills - The group develops interpersonal skills necessary for their function (i.e., conflict resolution)

Face-to-Face Interaction - The group must be small enough to promote physical as well as psychological closeness. Four to five members is an effective number.

*Johnson, David, Advanced Cooperative Learning, Edina, MN: Interaction Book Co., Pgs. 1.12-1.24

LESSON PLANS USING COOPERATIVE LEARNING

The following are lesson plans developed to incorporate Cooperative Learning experiences. Once a teacher understands the theories involved in this method, it is not difficult to incorporate it into the classroom work. While adult education classrooms tend to emphasize students working alone, teachers are encouraged to develop special assignments using Cooperative Learning experiences with small numbers of their students.

Cooperative Instructional Strategy

Discipline/Program Areas: Communications **Topic:** Jigsaw With Five Readings

Step one - Select a task.

To understand and interpret five fables relating to everyday life. Each group establishes the meaning of its fable and participants must explain it to the group.

Step Two - Make decisions.

Group size: Students equally divided into five groups

Assignment to groups: Dependent on instructor's purpose

Room arrangement: Chairs into five equally-sized groups

Materials needed: Copies of fables, sets of numbered cards, flip charts or newsprint, and markers

Roles to assign: Reader/recorder, checker/quizzer, encourager and task manager

Criteria for success: Everyone must understand and be able to explain his or her group's analysis of the fables to the remainder of the class.

Step three - Plan the lesson in language students understand.

Build in the five basic elements

1. **Positive interdependence**

Each group establishes meaning of its fable (one product) and each individual must be able to explain it, thereby demonstrating mastery of the material. The consensus is written on a piece of paper.

Alternatives	
1	Mutual goals
2	Joint rewards/grades
3	Shared resources
4	Assigned roles

2. **Face-to face promoting interaction**

Members of the five groups draw a card with a number (one through five) on it and form new groups (all ones together, twos, threes and so on). Each person in this new group will explain the fable they discussed in their first group while the other members listen carefully so all members understand all five fables.

Alternatives	
1	Knee-to knee, eye-to-eye
2	Group able to see instructor

3. Individual accountability

Each group member must understand all the fables and their meanings, and the group must sign the list stating they understand the meanings and agree with them. Any group member can be picked at random to answer questions about any of the five fables.

Alternatives	
1.	Individual test/quizzes
2.	Random calling on students
3.	Observing students
4.	Assigned roles
5.	Frequent assessment and feedback

4. Interpersonal and small group (social) skills

a. Active Participation
b. Checking
c. Encouraging
d. Asking for help
e. Clarification, elaborating by all members

Alternatives	
1.	Selecting a social skill (trust, active communication, support)
2.	Developing a T-chart
3.	Monitoring groups by recording data

5. Group processing

a. Analyze how well this group functioned and how well they use cooperative skills. (Processing can be done by individuals, small groups or the whole class.)
b. Have the group routinely list three things they did well at working together today and one thing they will do better the next time.

Alternatives	
1.	What worked? What didn't?
2.	Check sheets
3.	Feedback on observation

Operating Hints (ideas for extension, cautions, suggestions)

Over the next two weeks, a Paideia seminar is conducted on each fable. After each seminar, each student writes and turns in a one-minute paper on what he got out of the seminar. After all seminars are concluded, each student chooses one of the five fables and writes a short paper about the fable, its meaning, and what he learned from the experience.

A group reward of three extra credit points is given to each group that completes its tasks, and an individual grade is given to students for their one-minute comments on their short papers.

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Cooperative Instructional Strategy

Discipline/Program Area: Interdisciplinary **Topic:** Structured Controversy

Step One - Select a task.

Students will learn group dynamic skills aimed at structured controversy.

Step Two - Make decisions.

Group size: Four

Assignment to groups: Teacher assigned

Room arrangement: Seating able to be grouped into fours

Materials needed: Paper, pencils and reference materials on chosen topic

Roles to assign: Recorder/racer, quizzer/checker, encourager and task manager

Criteria for success: Students learn and use needed social skills such as leadership, decision-making, trust-building, communications and conflict management.

Step three - Plan the lesson in language students understand.

a. Students in groups of four write one report on the topic. Then groups are divided into two-person advocacy teams with one team being given the pro

position and the other being given the con position. Both teams will be given materials explaining the topic and newspaper, magazine and journal articles supporting their assigned position. Each class runs two hours.

b. Give peers 45 minutes to read and discuss the materials and plan how to best present their views. Students then organize information and experiences and draw conclusions for their position.

c. The two advocacy teams have 10 minutes each to actively present and advocate their positions. Each pair presents its position and reasoning presented previously with their opposing views.

d. Students have a 15-minute general discussion where they advocate their position, counter attacks on their position, refute the opposing position and attempt to learn both positions.

e. Students then reverse perspectives and present the opposing position (20 minutes)

f. Students regroup after arguments are presented into original foursome to reach a consensus of their views and prepare a written response to be read aloud. All members of the group must agree on the response and sign the written statement.

Build in the five basic elements.

1. **Positive interdependence**

   a. Assign role for each group member: recorder/reader, quizzer/checker, encourager, task manager
   b. Separate contributions
   c. All members demonstrate mastery
   d. Each group member will receive three extra credit points when the group achieves its goals

Alternatives	
1	Mutual goals
2	Joint rewards/grades
3	Shared resources
4	Assigned roles

2. Face-to-face promoting interaction

Both groups of four at times, at other times with a partner who represents the same side of the argument

Alternatives	
1	Knee-to knee, eye-to-eye
2	Group able to see instructor

3. Individual accountability

a Each student is responsible for learning the material.
b Group members will be picked at random to answer questions.
c Each person will have one minute to defend a position and make a charge against the other team.

Alternatives	
1	Individual test/quizzes
2	Random calling on students
3	Observing students
4	Assigned roles
5	Frequent assessment and feedback

4. Interpersonal and small group (social) skills

a Students will be critical of ideas, not people.
b Try to understand both sides of the issue.
c Listen to everyone's ideas.
d Restate things that are not clear.

Alternatives	
1	Selecting a social skill (trust, active communication, support)
2	Developing a T-chart
3	Monitoring groups by recording data

5. **Group processing**

a How well did we do the expected behaviors we were observing?
b List two things we did well as a group.
c List one thing we could do better next time

Alternatives
1. What worked? What didn't?
2. Check sheets
3. Feedback on observation

Operating hints (ideas for extension, cautions, suggestions)

Note: Writing will be used as a follow-up activity in future classes.

a Each group will prepare one written report and submit it to the instructor as their project.
b Each student will write about his role in the group.
Example: This exercise made me feel _____.
I wish I said _____.
I wish I had done _____.

****

Cooperative Instructional Strategy

Discipline/Program Areas: Mathematics **Topic:** Exponents

Step one - Select a task.

Instructor briefly discusses topic: introduction to exponents, use of parentheses and order of operation agreement. Students will work and discuss eight problems assigned cooperatively.

Step Two - Make decisions.

Group size: Three

Assignment to groups: Count off depending on class size (33 students, count one to 11, three times)

Room arrangement: Moveable chairs/desks and space enough for several groups of three students to work without distraction
Materials needed: Paper pencil, notes and textbook

Roles to assign: Reader/recorder, checker/quizzer, encourager and task manager

Criteria for success: Set scale on quiz so that in order for the group to have a successful score, all three scores have to be included. Each person can make a maximum of 20. The group needs a total of 45 to 60.

Step three - Plan the lesson in language students understand.

Build in the five basic elements.

1. **Positive interdependence**

   a One paper will be turned in.
   b All members sign that they agree the problems are correct.
   c On individual quizzes, extra points will be given if all members get 80 percent or above.

Alternatives	
1	Mutual goals
2	Joint rewards/grades
3	Shared resources
4	Assigned roles

2. **Face-to-Face promoting interaction**

   Students move desks/chairs so they are knee-to-knee and eye-to-eye in a semicircle facing the teacher.

Alternatives	
1	Knee-to knee, eye-to-eye
2	Group able to see instructor

3. Individual accountability

Anyone in room can be called on to explain a problem on the board or to explain a concept orally. Quiz on material.

Alternatives	
1.	Individual test/quizzes
2.	Random calling on students
3.	Observing students
4.	Assigned roles
5.	Frequent assessment and feedback

4. Interpersonal and small group (social) skills

a. Discuss with class each person's role. Have them do a "looks like, sounds like" chart as a class for each role.
b. Circulate and monitor groups.
c. Discuss observation sheet exercise on a different day.

Alternatives	
1.	Selecting a social skill (trust, active communication, support)
2.	Developing a T-chart
3.	Monitoring groups by recording data

5. Group processing

a. Have groups discuss and write down three things they did well and one or more ideas of how they could improve.
b. Randomly have one group report.
c. Collect and give total list next class meeting to all.

Alternatives	
1.	What worked? What didn't?
2.	Check sheets
3.	Feedback on observation

UNIT 7: PAIDEIA

THE LEARNER WILL BE ABLE TO:

- ✓ **Identify the three Paideia modes of learning/teaching**
- ✓ **Explain the components of the three Paideia modes of learning/teaching**

PAIDEIA

Paideia is an approach to teaching that combines both the old and new. Its objective for everyone is to develop the skills needed to be a lifelong learner, earner and productive citizen. The roots of Paideia are in the teachings of Socrates and, today, the method stresses the importance of critical thinking, which enables students to become actively involved in their own learning process.

Mortimer Adler, considered the founder of Paideia movement, and the Paideia Council have published several books that have transformed the Socratic method into one of the most successful modern education reform movements.

Paideia workshops offer participants an opportunity to learn how to engage others in discussions that allow everyone to explore great works of humankind to create a more meaningful understanding of a primary work. This exploration results in deepened insight and increased appreciation of the ideas of others.

The three modes of learning/teaching within Paideia are: didactic classes, coaching labs and seminars.

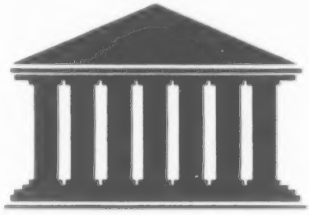
- **Didactic classes** are the starting point in Paideia which provide the acquisition of

organized knowledge and for the retention of facts and information. In this mode, participants learn concepts, skills and formulas through hands-on projects, films, lectures and study guides that require active involvement.

- **Coaching Labs** are the core of the Paideia program and lead to the development of intellectual skills through the use of exercises and supervised practice. In this mode, teachers act as guides to help students learn by doing. The goal is that participants will practice and master the skills introduced in their classes and develop a better base for refining their speaking, listening, observing and critical judgment skills.

- **Socratic seminars** are the culmination of Paideia and can lead to increased understanding of ideas and concepts. These 50-80 minute group discussions require students to think critically to understand ideas, solve problems, make decisions, resolve conflicts and apply knowledge and skills to new situations. Seminars examine the validity of the facts and skills.

DECLARATION OF PAIDEIA PRINCIPLES



We the members of the Paideia Council hold these truths to the Principles of the Paideia Program:

- that all children can learn,
- that, therefore, they all deserve the same quality of schooling, not just in the same quantity;
- that the quality of schooling to which they are entitled is what the wisest parents would wish for their own children, the best education of the best being the best education for all;
- that schooling at its best is preparation for becoming generally educated in the course of a whole lifetime, and that schools should be judged on how well they provide such preparation.

- That the three callings for which schooling should prepare an American are, (a) to earn a decent livelihood, (b) to be a good citizen of the nation and the world, and (c) to make a good life for one's self,
- that the primary cause of genuine learning is the activity of the learner's own mind, sometimes with the help of a teacher functioning as a secondary and cooperative cause,
- that the three kinds of teaching that should occur in our schools are didactic teaching of subject matter, coaching that produces the skills of learning, and Socratic questioning in seminar discussion,
- that the results of these three kinds of teaching should be (a) the acquisition of organized knowledge, (b) the formation of habits of skill in the use of language and mathematics, and (c) the growth of the mind's understanding and of basic ideas and issues,
- that each student's achievement of these results would be evaluated in terms of that student's competencies and not solely related to the achievements of other students,
- that the principal of a school should never be a mere administrator, but always a leading teacher in the school who should be cooperatively engaged with the school's teaching staff in planning, reforming, and reorganizing the school as an educational community,
- that the principal and faculty of a school should themselves engage in learning, and
- that the desire to continue their own learning should be the prime motivation of those who dedicate their lives to the profession of teaching.

*National Paideia Center, School of Education, CB-#8045, University of North Carolina at Chapel Hill, Chapel Hill, NC 27599

THE PAIDEIA PROGRAM

- Same objective for all: to develop the skills to be a lifelong learner, earner, and citizen
- Same strong liberal arts course of study for all
- Three modes of learning/teaching: didactic classes, coaching labs, seminar

MODE 1 **DIDACTIC CLASSES**

Acquiring knowledge

Didactic classes are the starting point for the Paideia experience. Students learn concepts, skills, and formulas through texts, lectures, films, and study guides in classes that require active student involvement.

MODE 2 **COACHING LABS**

Developing the skills of learning

Coaching labs are the core of the Paideia experience. Students practice and master skills introduced in their didactic classes. They meet in a 50-80 minute lab for each academic subject: math, science, social studies, writing, and reading. Placing two coaches (teachers) in each lab allows them to work closely with individuals and small groups. Students learn by doing.

MODE 3 **SEMINAR**

Thinking critically, understanding ideas,
improving communication

Seminar is the culmination of the Paideia experience. These weekly 50-80 minute group discussions of great literature and ideas are led by two teachers. Each student must think critically to understand ideas, solve problems, make decisions, resolve conflicts, and apply knowledge and skills to new situations. Speaking and listening are improved.

INSTRUCTION

ACQUISITION OF ORGANIZED KNOWLEDGE
by means of

DIDACTIC INSTRUCTION

TEXTBOOKS AND OTHER AIDS
in three areas of subject matter

LANGUAGE
LITERATURE
THE FINE ARTS

MATHEMATICS
NATURAL SCIENCE

HISTORY
GEOGRAPHY
SOCIAL STUDIES

COACHING

DEVELOPMENT OF INTELLECTUAL SKILLS by means of

COACHING EXERCISES

SUPERVISED PRACTICE
in the operations of

READING
WRITING
SPEAKING
LISTENING
CALCULATING
PROBLEM-SOLVING
OBSERVING
MEASURING
ESTIMATING
MATHEMATICS
EXERCISING CRITICAL JUDGMENT

SEMINARS

ENLARGED UNDERSTANDING OF IDEAS AND VALUES by means of
SOCRATIC QUESTIONING

ACTIVE PARTICIPATION
in the

DISCUSSION OF BOOKS (NOT TEXTBOOKS)

DISCUSSIONS OF WORKS OF ART

INVOLVEMENT IN ARTISTIC ACTIVITIES (e.g. Music, Drama, Visual Arts)

EVALUATION AND ASSESSMENT OF PAIDEIA SEMINARS

Most standardized assessment instruments are not designed to measure the effects of Paideia seminars. As more assessment utilizing portfolio techniques and student performance criteria become available, the seminar effects will be more apparent.

In Chicago, three hundred teachers, students, principals, and central office staff were interviewed. They cited the following as demonstrable effects of the Paideia program:

- increased conceptual understanding
- increased verbal articulation skill
- increased listening skill
- increased writing skill

In the worst case yet studied, students participating in Paideia programs demonstrated the same standardized test scores as those not participating in the programs. In the best case, these test scores went up. Teachers in the Paideia program say that Paideia classes result in more outside reading, in a decline in drop-out rates, and an increase in the number of students who go on to post-secondary educational opportunities.

Harold Stephenson, writing about individualized instruction, says that "80% of the students will be ignored in large-group classes, but in small-group instruction, students will get attention from the group if not from the teacher."

Kathleen Cushman, writing in The Harvard Education Letter, September 1992, says that "Seminars can also be a powerful way to start to eliminate tracking by ability levels. Collaboration among students forms bonds that help new learning take hold, often without teacher intervention....An assessment of Chicago's open-enrollment Paideia Program in 1987-88 found that participants had better attendance, fewer instances of failure on standard achievement tests, and better critical thinking and writing skills than non-participating students."

LEADING SEMINARS

TIPS ON LEADING SEMINARS
DO'S & DON'TS

Do maintain the rules

Do provide a safe environment

Do ask short questions

Do allow for periods of silence and thinking

Do recognize and deal with your own body language and its messages

Do seek student feedback on your leadership and the seminar

Don't over prepare students with background information

Don't give your own personal opinion

Don't use prepared lists of questions in place of working seminar responses to a few questions

Don't limit student participation due to poor reading ability

PAIDEIA SEMINAR RULES

1. Come well prepared
2. Be courteous
3. Give evidence from the text
4. Raise questions about responses
5. Be an active listener
6. Make room for productive silence

Participating in a Paideia seminar is a shared responsibility.

Anyone may pose a question at any time.

PAIDEIA EXERCISE:

MOTHER TO SON

Well, son, I'll tell you:
Life for me ain't been no crystal stair.
It's had tacks in it,
And splinters,
And boards torn up,
And places with no carpet on the floor -
bare.
But all the time I'se been a-climbin' on,
And reachin' landin's,
And turnin' corners,
And sometimes goin' in the dark
Where there ain't been no light.
So boy, don't you turn back.
Don't you set down on the steps
'Cause you finds it's kinder hard.
Don't you fall now -
For I'se still goin', honey,
I'se still climbin,
And life for me ain't been no crystal stair.

==========

In the Paideia classroom, a teacher would instruct his students to read the above poem by Langston Hughes to themselves.

He would then give a short presentation on the Paideia Method, explaining to the students how a Paideia discussion works and the rules to be followed. The seminar leader/facilitator can begin the discussion with the following round robin exercise:

- Have each participant draw his idea of a crystal stair and take one minute to explain it.
- The leader will then start the seminar with a question.

1. What do you think the author is saying about life when referring to the line, "life for me ain't been no crystal stair"?
2. What role does dialect play in this piece?
3. What role does imagery play in this piece?
4. If the stair is not a crystal stair, what is it?
5. Whose values are being discussed in this piece? Explain your answer.

THE NATIONAL PAIDEIA CENTER

The national Paideia Center promotes the efforts of educators who are implementing the long-term reform of public education known as the Paideia Program. In the early 1980's a group of scholars and educators, headed by Mortimer Adler, stated that a truly democratic society has a responsibility both to provide a high-quality education and to provide this education to all of its members. They concluded that our current public schools, in most cases, are accomplishing neither goal successfully.

The goal of the Paideia program is to provide a rigorous, liberal arts education in grades K - 12 which will allow all of its graduates to have the skills necessary to earn a living, to think and act critically as responsible citizens, and to continue educating themselves as life-long learners. The program takes the following view of the ways in which learning takes place.

- The **Didactic** mode is the acquisition of organized knowledge through means such as textbooks, lectures, videos. John Goodlad has estimated that roughly 85% of our classroom instruction time in the U.S. is currently spent this way. While necessary, this portion of learning should be more interactive and should monopolize much less of the school day.

- The **Coaching** aspect of the program is the way students actively gain the intellectual skills which are necessary for further learning. Coaching is the core of the Paideia

Program and requires practice, mastery, and learning by doing. The amount of time given to this activity should be greatly expanded, and a wide array of methods and approaches should be used in the classroom (e.g. labs, cooperative learning techniques, peer and cross-age tutoring).

- The **Seminar** component is a way for students to deepen their understanding of the ideas they may have been studying and to apply them to their own lives and values. Seminars should be used as a regular instructional method in all grades, K - 12. The seminar process, with the teacher facilitating an open exploration of the ideas in a work, has the greatest capacity to transform the nature of school for students and teachers because:

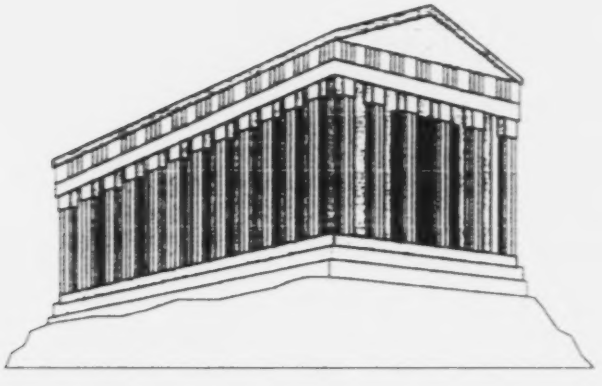
  - bond of mutual respect is created, both peer to peer and teacher to student,
  - each student must think critically to understand ideas, solve problems, make decisions, resolve conflicts, and apply knowledge and skills to new situations,
  - articulation, listening, and critical thinking skills are improved.

  For these reasons, the seminar is usually the Paideia method first introduced to schools. Students and teachers find that skills in seminar transfer to their own subjects, improving attitudes and motivation.

  Since the Paideia Proposal was first published, hundreds of schools have adopted aspects of the program. At least a dozen public, full Paideia schools are now in existence covering grades K - 12. These schools have reported positive results with better attendance rates, increased college acceptance rates, lower incidence of dropping out, and improved test scores. The Paideia methods have been especially effective with at-risk and minority students.

The National Paideia Center was established in the School of Education at UNC-Chapel Hill in 1988. It mission is to:

- act as an information clearinghouse for schools nationwide that are establishing Paideia programs;
- provide training in Paideia methods and technical assistance to interested schools and educators;
- create a group of Paideia schools in the local area to serve as national demonstration sites for implementation; Githens Middle School, in Durham, is now in its first year of this process;
- continue research on the evaluation of the results of Paideia methods.



For further information contact:

The National Paideia Center
School of Education
The University of North Carolina at Chapel Hill
Campus Box #8045
Chapel Hill, NC 27599
(919) 962-7379 or FAX (919) 962-7381

APPENDIX

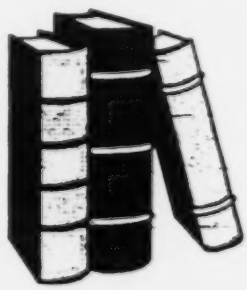
ANSWER KEYS

PRE-TEST

POST-TEST

INSTRUCTOR SELF-EVALUATION

STUDENT EVALUATION



PRE-TEST ANSWER KEY

1.	A	16.	C
2.	B	17.	D
3.	D	18.	C
4.	C	19.	C
5.	C	20.	D
6.	B	21.	C
7.	D	22.	C
8.	B	23.	D
9.	C		
10.	C		
11.	D		
12.	C		
13.	E		
14.	B		
15.	B		

POST-TEST ANSWER KEY

1.	B	16.	C
2.	B	17.	E
3.	E	18.	D
4.	C	19.	D
5.	B	20.	D
6.	D	21.	C
7.	A	22.	D
8.	D	23.	D
9.	A		
10.	D		
11.	D		
12.	B		
13.	E		
14.	D		
15.	D		

QUALITY PROFESSIONAL DEVELOPMENT PROJECT

INSTRUCTOR SELF-EVALUATION

DIRECTIONS: Please use the scale to respond to each statement:

5 = Strongly agree
4 = Agree
3 = Neither agree nor disagree
2 = Disagree
1 = Strongly disagree

Because of this manual I

1	can identify the principles that describe learning	1 2 3 4 5
2	can identify the characteristics of instruction that promote learning	1 2 3 4 5
3	can comprehend the theory of multiple intelligences	1 2 3 4 5
4	can identify the eight intelligences with visual and written clues	1 2 3 4 5
5	can understand how a learning disability is defined	1 2 3 4 5
6	can understand what characteristics are commonly found in students with learning disabilities	1 2 3 4 5
7	can understand the evaluation process in diagnosing a learning disability	1 2 3 4 5
8	can implement practical strategies in the classroom to maximize the functioning of individuals with learning disabilities	1 2 3 4 5
9	can define the accelerated learning teaching approach	1 2 3 4 5

10.	know the mental activities of the left and right brain hemispheres	1 2 3 4 5
11.	understand the definition and purpose of Whole Language Learning, its general teaching approach and benefits to the adult learner	1 2 3 4 5
12.	understand the advantages of using volunteers in the classroom as tutors	1 2 3 4 5
13.	understand several whole language methods that can be taught to volunteers for classroom tutoring	1 2 3 4 5
14.	understand the basic goal of cooperative learning	1 2 3 4 5
15.	can use it in a adult education classroom	1 2 3 4 5
16.	can identify the three Paideia modes of learning/teaching	1 2 3 4 5
17.	explain the components of the three Paideia modes of learning/teaching.	1 2 3 4 5

Please respond to the following statements:

1. I found the material most relevant to my classroom work was the information on

_____

_____

2. Because I have a greater understanding of learning theories, I find that I am approaching my students in the new ways identified below:

_____

_____

3. Because I have a better understanding of the teaching methodologies introduced in this manual, I find that I am using them in the new ways identified below:

_____

_____

4. Additional comments

_____

_____

_____

_____

QUALITY PROFESSIONAL DEVELOPMENT PROJECT

STUDENT EVALUATION

Please answer the following questions about your instructor in this class. The evaluation will not affect your teacher's job in any way because we will not know who your teacher is. You should be very honest in rating your instructor.

DIRECTIONS:

Please use the following scale to rate your instructor:
(Circle the number that matches your opinion.)

5 = STRONGLY AGREE
4 = AGREE
3 = DON'T KNOW
2 = DISAGREE
1 = STRONGLY DISAGREE

1.	My instructor explained what was expected of me in the classroom	5	4	3	2	1
2.	My instructor presents the subject matter in a way that I can easily understand	5	4	3	2	1
3.	My instructor understands me and how I learn	5	4	3	2	1
4.	My instructor is open to questions or comments from students	5	4	3	2	1
5.	My instructor makes time to work directly with me when I need it	5	4	3	2	1
6.	My instructor helps me find extra materials or learning activities when I have problems learning from the regular classroom materials	5	4	3	2	1
7.	My instructor provides feedback on all my work quickly enough to benefit me	5	4	3	2	1
8.	My instructor seems to respect me as a person	5	4	3	2	1
9.	My instructor encourages me to succeed	5	4	3	2	1
10.	I would recommend this instructor to another student	5	4	3	2	1

COMMENTS: _____

_____